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**Virtual Guitar adds realism to musical fantasies**Newsbytes News Network, Jan 20, 1995 by Paul De Groot

Virtual Guitar Adds Realism To Musical Fantasies 01/20/95 BEDFORD, MASSACHUSETTS, U.S.A., 1995 JAN 20 (NB) -- The air guitar is a fantasy instrument so popular it has inspired real performances and contests. Now there's the Virtual Guitar, which requires no greater musical skill than the completely imaginary version, but which adds the challenge of keeping up with real musicians as they progress from garage band to sold-out arena.

Produced by Ahead, Inc. of Bedford, Massachusetts, the Virtual Guitar consists of a life-sized replica of a guitar which connects to the serial port of a computer and permits the player to play along with a CD-ROM-based band.

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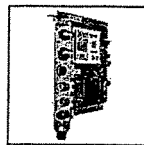
The software plays the music through a sound card, but also shows a "Rhythm EKG," oscilloscope-like traces at the bottom of the screen which tell the player when to strum the guitar to keep up with the rhythm. As the player strums, the software adds the appropriate chords and plays them through the sound card.

The software can measure how well a player matches the real track, and depending on how well they do, players can advance to the next level (from their own bedroom to garage band, a blues club, a recording studio and a fan-packed stadium).

At more advanced levels, the player can choose to advance from basic accompaniment to rhythm to lead guitar. Although the virtual guitar has no strings on the neck, the software can determine which string on the main part of the instrument has been plucked.

Players can adjust guitar volume, distortion and feedback from a panel on the guitar.

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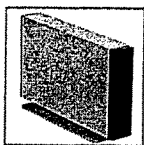
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The game also provides feedback to players. A good performance will win praise from the band Aerosmith (which is featured in a number of video segments) or advice to go back to the garage or bedroom.

Developed last fall, the Virtual Guitar technology was purchased by Walt Disney for inclusion in the Innoventions pavilion at Epcot Centre, where it is the second most popular attraction, according to David Jacobson of Corporate Ink, a Boston public relations firm associated with the company.

"Even novices can play virtual music and deliver an acceptable performance, because the software handles the melody," says Alex Donnini, president of Ahead.

"You don't have to learn any notes. The player's challenge is to strung the strings with the right rhythm and beat, or to match the lead and carry the melody. Anyone who has ever played with a band can tell you that's not as easy as it seems."

The Virtual Guitar sells for \$99, which includes the guitar and one "Welcome to West Feedback" CD-ROM. It requires a 486 PC with a double-speed CD-ROM drive and a 16-bit Sound Blaster compatible sound card. Minimum RAM is 4 megabytes, but eight is recommended.

Other CDs which include the "JamPak" technology include "Quest for Fame: Featuring Aerosmith" and "Welcome to West Feedback II."

The JamPak technology adds interactivity to musical CDs and could be incorporated into many musical discs, says Donnini. If the technology were used more widely in the music industry, CDs which could be used with the guitar could be sold for only a few dollars more than regular CDs, Donnini suggests.

(Paul De Groot/19950120/Reader Contact: Ahead, Inc., 800-872-7827; Press Contact: David Jacobson, 617-969-9192/VIRGUITAR950120/PHOTO)

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**WINDOWS CD-ROM**





## Virtual Music Help

The help here is organized into several sections. If you click on any of the sections below, you will be able quickly to get to the information you're looking for. Alternatively, you can click on the "Search" button above and look for keywords to help you find what you need.

**Important Information: Please Read!!!**

**Installation**

**Troubleshooting**

**About the Game**

**Using the Web Site**

**Contacting Technical Support**

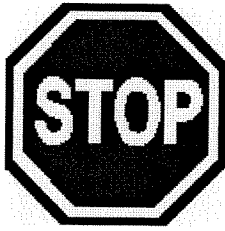
**Dialog Box Help**

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### **Important Information: Please Read!!!**

**To start Quest for Fame:** The installation program added a program group called "Virtual Music Entertainment" to your Program Manager (Windows 95 users will have a new program menu added under "Programs" on the "Start" menu). To start the game, simply double-click on "Quest for Fame" in the "Virtual Music Entertainment" program group.

**To adjust the sound levels:** Once you start Quest for Fame, the first thing you may want to do is adjust the sound levels. To do this, start a new game, and in the bedroom, click on the "sound" button at the top of the screen. There will be several sliders on the screen that you can adjust by clicking on them. If you click on the "Test" button, a sample song will play in order to allow you to mix the sound levels. When you're done, click on "Exit" and you will enter the game where you left off.

After reading this information, you can exit Windows Help by clicking on "File" in the menu above and then clicking on "Exit." If you want to read more about the game, click on the button labeled "Contents." To find out more about how Windows Help works, type the F1 key.

The VPick works great on tennis rackets. However, because it is made of durable plastic, it may scratch or otherwise damage the racket.

If you choose to play the VPick against your leg or hip, wear protective clothing. Do not use the VPick against your bare skin.

If you find your wrists or arms becoming sore or tired while you're playing the game, stop and do something else for a while. If you're not used to it, playing the VPick can be difficult exercise for your hands and arms.

Do not get the VPick wet while using it. If you accidentally get it wet, disconnect it from the computer and allow it to dry completely (inside and out) before using it again.

Do not attempt to open the VPick. There are no user-serviceable parts inside, and once opened, the VPick cannot be repaired.

Do not use the VPick for anything other than its intended purpose.

## **Installation**

To install your Virtual Music game, first read the System Requirements to make sure your system will run the game. Then follow the instructions for Hardware Installation to install the VPick. Finally, follow the instructions for Software Installation to install the game software. Depending on your system, you may also need to consult one of the other sections below. If you have any problems, refer to the section on Troubleshooting.

**System Requirements**

**Hardware Installation**

**Software Installation**

**Continuing from Installation Errors**

**Setting Up Your Video Card**

**Installing Video for Windows**

## Hardware Installation

### Installing the VPick

Installing the VPick is very easy and should take you only a few minutes:

1. Exit from Windows and turn off the power to your system.
2. Locate the printer port where you will be installing the VPick. If a printer is already connected to the computer, refer to the section on Using the VPick with a Printer. Otherwise, find the parallel port. It should be a female DB-25 connector and may have a label such as LPT or PRINTER or a small picture of a printer next to it.
3. Plug the VPick connector into the printer port.
4. Turn on the power to your system. After it has started, run Windows.

### Connecting to a Stereo

**VERY IMPORTANT:** Before attempting to connect your computer to a stereo, refer to the instructions that came with your sound card, or contact the sound card's manufacturer.

You have probably noticed that music sounds much better on your stereo than on the speakers that came with your computer, but what you may not know is that you can usually *connect* the computer to the stereo. Since the Virtual Music games depend on great music, this connection makes them even better.

You can generally make this connection via a "stereo mini-phonon to RCA" cable. You may have received one with your sound card; if not, you may have to buy one at your local electronics or computer store. This cable will usually connect the LINE OUT on the sound card to the AUX on your stereo.

## Software Installation

Installing the Virtual Music software is extremely straightforward and should take you less than five minutes.

1. Run Windows (if it is not already running).
2. Insert the Virtual Music CD-ROM into your CD-ROM drive with the silver side face down.
3. If you're running Windows 95, go to step 4. Otherwise, in the Program Manager, click on the menu item "File", then click on "Run...", type the following line into the box labeled "Command Line":

D:\SETUP

and press the Enter key. Note that the "D:" must be the drive letter of your CD-ROM. Go to step 5.

4. If you're running Windows 95, a small banner will be displayed after you insert the CD. You can click on the "Setup" button in this box to install the game. To start the installation at any other time, you can click on the "Start" button in the Taskbar, then click on "Run...", type the following line into the box labeled "Open":

D:\SETUP

and press the Enter key. Note that the "D:" must be the drive letter of your CD-ROM.

5. Follow all directions displayed on the screen during the installation. When the installation has been successfully completed, the program group named "Virtual Music Entertainment" will contain an icon labeled "Quest For Fame" that looks like this:



Double-clicking on this icon will run the game.

## Continuing from Installation Errors

If you encounter a problem while installing the Virtual Music software, you can usually correct it yourself and then proceed with the installation without having to start over from the beginning. Some problems can be corrected without even exiting from the installation. If this is the case, you can click on the "Try Again" button after correcting the problem, and the installation will proceed normally.

Some problems do require you to exit from the installation in order to correct them, and most will allow you to do so if you wish. Simply click on the "Stop" button to exit from the installation; after you have corrected the problem, run the installation as if you were starting over. The installation will notice that it has already been partially completed and will give you the option of continuing where you left off.

## Setting Up Your Video Card

The two major tasks involved in setting up your video card for Virtual Music are setting up the color depth and setting up the resolution.

The color depth simply refers to the number of different colors the card can display. This number can be expressed in two ways, as either the actual number of colors or the number of bits in the colors. The numbers you're most likely to see are: 16 colors (4 bits), 256 colors (8 bits), 32,768 colors (15 bits), 65,536 colors (16 bits), and 16,777,216 colors (24 bits). Virtual Music works just fine with any number of colors equal to or greater than 256. Unfortunately, the default installation of Windows 3.1 sets up the video card for only 16 colors.

The resolution is a measure of how many dots the card can display horizontally and vertically. It is expressed as two numbers, the first referring to the number of horizontal dots and the second to the number of vertical dots. Here, the numbers you are most likely to see are: 640 x 480, 800 x 600, 1024 x 768, and 1280 x 1024. Virtual Music will work fine on any of these.

The optimal configuration for most systems is 640 x 480 resolution with 256 colors. Greater resolution will just make the picture smaller and harder to see, and more colors may make the video run slower and the REKG jerky.

Setting the color depth and resolution can be frustrating because every video card seems to have a different way of going about it.

First see if there is a special utility designed to change settings on the video card. This utility will usually be in one of four places--in the "Main" program group, in the Control Panel, in a separate program group installed with the video-card software, or right on the desktop, as a program that runs when Windows starts. Its name may contain the words "Set," "Resolution," and/or "Control." When you run the utility, there may be a number of options, which should include adjustments for setting color depth and resolution as described above. You will probably need to restart Windows after changing these settings.

**Windows 3.1:** If you can't find any such utility, try double-clicking on the "Windows Setup" icon in the "Main" program group. This will bring up a small window containing several system settings. The first line, labeled "Display," will show you the video-card driver you have installed; if you click on "Options" in the menu, then click on "Change System Settings ...", you'll get a dialog box that will allow you to change the driver. Click on the arrow next to the top box labeled "Display:", then scroll up and down until you find what you're looking for: a driver with the name of your graphics card and a notation such as "640 x 480 x 256" or "640 x 480 256 color." Select that driver, then click on "OK." You'll need to restart Windows to enable the change to take effect.

**Windows 95:** If you can't find a utility like this, try opening Control Panel and double clicking on the "Display" icon. In the "Settings" section, you can resize your desktop by moving the slider in the "Desktop area" box all the way to the left. The text in the box should then read "640 by 480 pixels". To change the number of colors, simply click on the down arrow button in the "Color palette" box. Select "256 Color", then click on the "OK" button. A box may appear asking you, "Do you want to restart your computer now?" You should answer "Yes" so that the changes will take effect before you run the game.

If you have one of the following video cards, we can give you more specific directions:

### Diamond Multimedia

Double-click on the "Control Panel" icon in the "Main" program group. Double-click on the red "InControl Tools" icon. Click on the "Display" button. Select 640 x 480 for "Desktop Size" and 256 for "Color Depth," then click on "OK." Follow the instructions to restart Windows.

### Genoa G-Vision DX

Double-click on the "Set Res" icon in the "G-Vision" program group. Under "Resolution," select 640 x 480. Under "Number of colors," select 256. Click on "OK." You will be prompted to restart Windows.

#### **Number Nine 9FX**

Double-click on the "Hawkeye Control Panel" icon in the "Hawkeye for Windows" program group. Double-click on the "Resolution Exchange" icon. Under "Colors," select 256. Under "Monitor," select 640 x 480. Click on "OK." You will be prompted to restart Windows.

#### **Orchid Technology Fahrenheit 64**

Double-click on the "Orchid Control Panel" icon. This is in the "Orchid" program group and also in the Control Panel, which you can get to by double-clicking on the "Control Panel" icon in the "Main" program group. Click on the "Display Setup" button. Select 640 x 480 for "Screen Resolution," and 256 for "Number of Colors." Click on the "Save" button.

#### **STB Horizon**

Double-click on the "Control Panel" icon in the "STB Vision" program group. Select 256 for "Colors" and 640 x 480 for both "Virtual Desktop Size" and "Resolution." Click on the "OK" button and follow the instructions to restart Windows.

#### **STB Nitro**

Use the "Windows Setup" icon in the "Main" program group as described above.

## **Installing Video for Windows (Windows 3.1 Only)**

To install Video for Windows, open the File Manager and click on the drive letter of your CD-ROM in the top bar. Click on the \VFW11E directory in the left-hand directory list, then double-click on SETUP.EXE in the right-hand file list (you may need to scroll down the list to find SETUP.EXE). When the starting screen comes up, click on the button labeled "Continue" and follow all directions displayed on the screen.



## Troubleshooting

If you're reading this, you must be having a problem. The first thing to remember is: Don't Panic! Lots of people have successfully installed Virtual Music and are right now having a great time jamming along with their favorite tunes, and you will soon be joining their number.

If you can't even get the installation started, see the section on Installation Problems.

If your problem is in this list, click on the item to find a solution:

1. You get into the game and one or more of the sliders in the sound-adjustment screen doesn't work correctly.
2. The installation tells you that you need a 256-color video card.
3. The VPick seems to be working (there are blue spikes in the REKG), but you don't hear any guitar sound.
4. The installation finds the VPick, but when you run the game, the VPick does not seem to be working (there are no blue spikes in the REKG).
5. The installation tells you that you need to install or update Video for Windows.
6. Your printer is already using the port you're supposed to connect the VPick to.
7. You have the VPick connected to your computer during installation, but the installation says it can't find the VPick.
8. You sometimes get an error box that says "Error in Module MMTASK," or an error box that mentions a "General Protection Fault."
9. Sometimes when you're playing a song, the screen saver kicks in and obliterates the game's graphics.
10. The REKG is very hard to follow, the video is jerky, or you hear breaks in the audio.
11. You're having a bunch of friends over for a party, and you want to show them how great Virtual Music is.
12. You occasionally get an error box that says "System Error: Cannot read from drive D."

If your problem doesn't appear in the list above, try consulting the section on General Troubleshooting.

If you are still having trouble, you may be able to find what you are looking for by clicking on the button labeled "Search" and looking for a topic describing your problem.

If you have access to the Internet, you may be able to find updated information on your problem at our Web site.

Finally, your problem may fall in the category of problems that we already know about:

- Known Problems with Video Cards
- Known Problems with Sound Cards
- Known General Problems
- Known Game Limitations

## About the Game

The Virtual Music game itself has a good story, lots of tools to help you play, and, above all, great music. Click on any of the following topics to learn more about these elements of the game.

### Tools

- [Menu Screen](#)
- [Control Bar](#)
- [Sound-Adjustment Screen](#)
- [Status Bar](#)
- [CD Player](#)
- [Game Hints](#)

### The Game

- [Overview](#)
- [Story](#)
- [Where You'll Go](#)
- [Whom You'll Meet](#)

### [Music](#)

## Menu Screen

The menu in the game allows you to select these important options:

### Introduction

Plays a brief introduction to the game that shows you a few of the scenes and characters.

### How to Play

Brings you to a secondary menu that allows you to pick **VPick Basics**, which shows you how to use the VPick effectively, or **Virtual Music Tools**, which gives you an overview of how to play the game.

### New Game

Starts a new game. If you're just starting for the first time, this is probably what you want to do. This menu item is also handy if you have finished the game and want to play it again from the beginning, or if you want to give up on your current game for a little while and try again.

### Load Game

Prompts you for the name of a saved game, then loads the saved game and starts playing from there. Saved games are created using the "Save Game" menu item described below.

### Save Game

Prompts you for the name of a game to save, then saves the current state of the game using that name. This is handy if you're ready to quit for a while but want to continue the game later, or if you're about to try something but aren't quite sure it will work, and you would like to have the opportunity to try it again a different way later.

### Credits

Shows you the names of all the people who worked hard to bring you this fine game.

### Return

Returns to the game at the point where you left it to come to the menus. If you're just starting a game, this menu item won't do anything, because there is no place for you to return to. You can use this menu item to continue on with the same game after saving a game.

### Exit

Exits from the game and returns to Windows.

## Control Bar



The control bar shown above appears at the top of the screen and provides access to important indicators and controls for the game. From left to right, these controls are:

### Song Level

These four indicators allow you to set the level at which you play a song. Clicking on a particular indicator before starting a song will set that song level (you're not always allowed to change the song level during the game). While you're playing, the song level that you have selected will be highlighted. The song levels are:

1. BASIC: A good starting point for beginners.
2. RHYTHM: A rhythm guitar part.
3. LEAD: A rhythm guitar part with some leads.
4. STUNT: Some rhythm guitar and a lot of leads.

### Hints

If you need some hints to help you through the game, you can click on the "Hints" button.

### Sound

Click on the "Sound" button to get to the sound-adjustment screen. This will let you set all the sound levels and also adjust distortion and feedback for your guitar sound.

### Pause

If you need to stop the game for a few minutes (to eat dinner, for example), you can click on the "Pause" button. This will stop the game and put up a "pause" screen. To continue the game, just click anywhere on the pause screen.

### Menu

Clicking on "Menu" will take you to the game menu, where you can choose from several options to control the game.

## Sound-Adjustment Screen

The sound-adjustment screen contains several sliders and buttons.

### Sliders

The sliders look like this:



To adjust a slider setting, use the mouse to point at the level where you want to set the slider and click. You cannot drag the mouse back and forth to set the slider level. The slider settings are:

#### Master Volume

Sets the overall volume of the sound. This setting may not be available with some sound cards, in which case you will have to use the mixer to adjust the overall volume.

#### Song Volume

Sets the volume of the other characters in the game, including both spoken lines and the music that the band plays.

#### Guitar Volume

Sets the volume of your guitar.

#### Guitar Distortion

Sets the amount of distortion in the sound of your guitar. Distortion, the amount by which the guitar pre-amp is overdriven, adds a distinct character to the sound.

### Buttons

The buttons look like this:



To activate a button, click on it with the mouse. The buttons are:

#### Feedback

Turns feedback on and off in your guitar sound. Feedback is generated when energy from the speaker in the amplifier causes the strings to vibrate; like distortion, it adds a distinct character to the sound of your guitar.

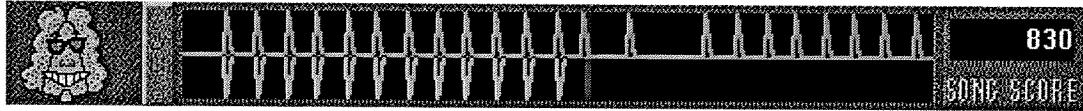
#### Presets

Clicking on one of the presets, either "Lead" or "Rhythm," will cause all the other settings to move to appropriate preadjusted values. If you don't want to bother setting up the other buttons and sliders, you can just click on one of the presets to get a pretty good setup.

## Test

When you're adjusting your sound, the only way you can really tell if you like the setup is to try it out. Clicking on "Test" will start up some music on the REKG for you to play along with to see if you like your sound. You can also try different adjustments while this music is playing.

## Status Bar



The status bar shown above appears at the bottom of the screen and provides important information on your playing. Its major elements, from left to right, are:

### Eddie

Eddie listens to you play and responds accordingly. When he looks really upset, you'd better straighten out and play right pretty quickly, because something bad is about to happen. Occasionally Eddie will take a break and be replaced by someone else; sometimes there won't be anyone there at all.

### REKG Switch

Clicking on this switch will turn the REKG on and off. Sometimes the switch won't be there, in which case you'll have to make do with whatever you've got. Even if it's turned off, the REKG may momentarily come on to help you out if you're having trouble.

### REKG

The Rhythm EKG, or REKG, is one of your primary tools for learning the songs. The red cursor moves from left to right as the song plays. Every time the red cursor moves over a green spike on top, you should be strumming with your VPick; whenever you play using your VPick, you'll see a blue spike appear on the bottom. The more accurately you play, the more closely the green spikes will be aligned with the blue spikes. A small section at the right end of the REKG is duplicated on the left, so as you get toward the right end, you can shift your gaze back to the left end and follow along there.

### Song Score

The song score shows you how you're doing. The score goes from 0 to 1000; the more accurate your playing, the better your score. Most places in the game require you to have a score of 750 or above in order to continue. At the lower difficulty levels, it is easier to get a higher score.

## CD Player

You can find the CD player in your bedroom. Its features will help you learn songs well, which will allow you to progress further in the game. The features are:



The "Power" button turns off the CD player, putting you back into the bedroom.



The "Practice" button keeps you at the CD player. If you don't click on the Practice button, you will go back to the bedroom when you start a song. The Practice button is useful if you want to work on songs without having to go back out to the bedroom.



If you forget how one of the CD player features works, click on the "Help" button, then click on the feature you want to know more about. Lloyd will tell you how that feature works.



Clicking on the song-selection arrows will move you back and forth through the list of available songs on the CD that is currently in the player. Clicking on a CD case to the left or right of the player will put that CD into the player and therefore change the songs that are available.



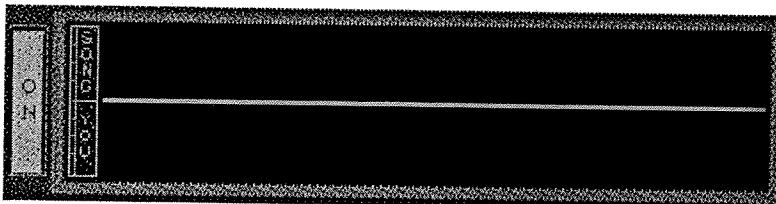
The song-title display shows the name of the song that is currently selected.



The song-section display shows the name of the section that is currently playing. You may find it useful to learn the names, so that later, when the garage band refers to the various sections of the songs, you'll know what they are.



The "Play" and "Stop" buttons start and stop the song that is currently selected.



The REKG on the CD player works just like the REKG everywhere else in the game, except that it is larger and easier to read.



## Game Hints

If you're having trouble getting through the game or figuring out how to proceed, click on the "Hint" button in the control bar at the top of the screen. You will be given a hint about what you should do next.

Here are some hints about the "Hint" button. First, you can get more than one hint by clicking on the "Hint" button more than once. Not only that, but the hints are different in different scenes, and sometimes a special hint will appear during a special situation. So even if you think you've heard them all, be sure to try out the hints if you're having trouble.

## Overview

Virtual Music is a fantastic new technology that lets you live out one of your dreams: to be a rock star. You don't have to know how to play guitar (or any musical instrument) to have fun with Virtual Music. You just have to be able to follow along on the REKG, which should be easy if you've ever played a video game.

Here's how it works: in the game, your multimedia computer plays a video of the characters in the game inviting you to play along with them. When they start playing, the REKG comes on, and you can use your VPick to play along on your favorite "air guitar" -- a tennis racket, a notebook, your leg, or just about anything. The characters will let you know how you're doing. If you really need a lot of work, they may even stop playing and ask you to practice before you come back. But that's not a problem, because just as in real life, you can always go to your bedroom and practice playing along with your CD player. And just as in real life, the more you practice, the better you'll get. There are places in the game where you'll need to know the songs without the REKG, but once again, you can always practice the songs that way in your bedroom. The more songs you learn, and the better you can play them, the further you can get in the game.

If you really love the game, you may want to get a Virtual Guitar. The Virtual Guitar is about the same size and weight as a real electric guitar, and you can use it to play Virtual Music the same way you use the VPick. You play the Virtual Guitar with a regular guitar pick, just as you would a real guitar, but you don't need to worry about your left hand -- the Virtual Music technology takes care of that for you. The Virtual Guitar gives you control over your sound while you're playing, just like a real guitar.

## Story

Quest for Fame takes place in the city of West Feedback. In some respects, West Feedback is a lot like any other city, but it also has a mysterious vibe: it literally resonates with harmonic energy like a plucked string, and sometimes, when the light is just right, you could swear that the buildings look like guitars.

Any serious guitar player worth his or her salt eventually ends up in West Feedback. For a long time, the undisputed king of the city was Lloyd. But one day, Lloyd had an accident while trying to achieve the ultimate sound that every guitarist seeks. He found the sound during a concert, but just as he was playing an unbelievable sustained note, he vaporized!

Disbelieving fans everywhere were in shock and mourning, but one person cackled with glee: Chops Felton. Chops had always had it in for Lloyd because *he* wanted to be king of the guitar world, but he just couldn't cut it. Oh, sure, Chops could play blazingly fast licks and get all the notes right, but he just never had Lloyd's soul—he was never truly one with the music. After Lloyd disappeared, no one else ever stepped up to fill his shoes, so Chops crowned himself the new king of guitar in West Feedback.

But Lloyd was never really gone; he had just been transported to a different plane of our universe. It was as if he were playing the same song but in a different key. It was a very peaceful existence for him because all his stress was a thing of the past: no more dealing with agents, no more getting stiffed by club owners, and no more head-to-head playing against Chops Felton. But he started to miss the music scene and began to look for a way to get back. He never did figure out how to come back physically, but he discovered that he could use the electrical system on our plane of the universe to assume a temporal existence here. Sadly, the connection was always weak and intermittent and never lasted for long--and what was worse, it seemed as if no one here could ever see him.

The first time Lloyd visited, he was horrified to learn what Chops Felton had been up to. Even worse, he discovered that Aerosmith was in town looking for some local talent to play along in the band's upcoming gig at the Humongodome. If Lloyd didn't do something quick, that local talent might end up being Chops.

But now everything is different because Lloyd just discovered **you**. He can scarcely believe his luck: not only are you a pretty good guitar player, but you can actually see and hear him. Unfortunately, you don't have a band, no one in West Feedback knows about you, and there's not much time left before Aerosmith opens at the Humongodome. But you have one very important secret weapon on your side: Lloyd. He's going to do all he can to get you where you need to be. But he can't do everything--the rest is up to you. So good luck, and remember: **crank it up!!!**

## **Where You'll Go**

There are lots of great places to go in West Feedback, and you can get to them all from the map of the city. Of course, you may find that you can't get *into* them until you've been invited.

### **The Bedroom**

Your bedroom is a safe haven: you can always practice playing along with your CD player there without anyone's getting on your case if you don't play well. But you're not completely isolated from the rest of the world, because people stop by to see you, and sometimes you get phone calls. Naturally, Lloyd has lots to say, and he doesn't bother to knock before coming in.

If you get tired of playing, you may want to take a break and switch on your TV set. You'll catch West Feedback's most popular daytime game show, "Nail That Riff." The show's popularity is based on its interactive hook: you have to play along from home. The prizes for winning are valuable CDs that will help you learn songs that you'll need to know.

### **The Garage**

You need to find a band to play with, and luck is with you: the band down the street is looking for a guitar player. The members get together and practice in the garage, and you can join them there to learn how to play along with a group. But make sure you practice up before you go there, because they won't put up with bad playing for very long.

### **The Roadkill Grill**

Sooner or later you'll need to step out in front of a live audience with your garage band. Your brand-new (self-appointed) agent Charlie will set up a gig for you at the Roadkill Grill.

The bad news is that the crowd is pretty rough at the Roadkill--not only rough in judging bad playing quickly, but rough physically, especially if you don't give it what it wants. The good news is that Tom Hamilton and Joey Kramer, both of Aerosmith, like to hang out at the Roadkill and listen to new bands. You can be pretty sure that Lloyd has arranged for them to be there, but it's up to you to impress them if you want to get anywhere.

### **The Polyester Lounge**

This place must be just a bad dream--or is it? Mediocre guitar players end up as lounge lizards, and if you're not careful, you'll be well on your way to that "goal" in this fine establishment.

### **Snooky's Juke Joint**

Aerosmith likes to make surprise appearances here at West Feedback's hottest after-hours bar. Attendance is strictly by invitation only, and Snooky, the owner, will make that crystal clear. But if you get invited and show up with your guitar, you may get a chance to play with the legendary Acemen, who have been around nearly since time began. And if you do well, you may find Snooky's to be a great informal setting for a jam with the Aerosmith band members--on their terms, of course.

### **Aero Studios**

Aerosmith has its own private recording studio in West Feedback, with all the latest equipment and the best people to run it to make really hot recordings. The studio also has a state-of-the-art security system, so admission is definitely by appointment only. When you get to Aero Studios, every tick of the clock costs money, so you'd better know what you're doing.

### **The Yak Hall**

Every band has gigs that it would prefer to have missed. The Fraternal Order of the Yak booked your band for its annual meeting, but it looks like the Yaks didn't know what they were in for. Can you make it out alive?

### **The Humongodome**

As you might expect, West Feedback has one of the finest rock concert stages in the world. It's up to you to figure out how to get up there in front of the audience, and once you do, you'd better be ready, because you won't get a second chance on stage.

## **Whom You'll Meet**

You're never alone in West Feedback. Here are just some of the characters you'll encounter on your way to the top:

### **Lloyd**

Lloyd used to be the king of guitar in West Feedback, but now he lives in another plane of our universe and you're the only person who can see him. He'll help you any way he can, but it's mostly up to you.

### **Mom**

Your mother has a tendency to barge in at the worst time, and sometimes the things she says are **so** embarrassing! But don't forget that she'll always be there when you need her, and of course, she's your biggest fan.

### **Bob Barracuda**

Bob is the host of West Feedback's high-tech interactive television game show, "Nail That Riff." The show will give you a chance to show off your guitar chops, get some exposure in the city, and win valuable prizes that will help you out later.

### **TT**

Your next-door neighbor TT plays the bass in a garage band just down the street. He knows great guitar when he hears it, so when he comes by to visit, be sure to show him your best. TT is easygoing and likable, and can be a true friend when times get tough.

### **Mark**

Mark is a good drummer in the garage band: he lays down a solid beat and can follow any changes, but his drumming doesn't stick out like a sore thumb. Occasionally he can get a little irritable, but if you're careful to play in rhythm, you'll always make him happy.

### **Toby**

Toby plays an ace rhythm-guitar part, but he's smart enough to know that he doesn't have the lead-guitar chops that the garage band needs. However, he can recognize good--and bad--playing, and he's quick to size up any new player. So you need to do a good job when you play around Toby.

### **Sheila**

Sheila's got the kind of voice that every garage band needs to make it. She realizes that the only thing her band is missing is a lead guitar player, and you may be just what she's looking for. She knows a great performance when she sees one, so don't let her down.

### **No-Cheat Charlie the Agent**

Charlie, your self-appointed agent, must have sold used cars at some point in his life. But even if he can't tell the difference between A-flat and a flat tire, he does seem to have connections at all the clubs in town. Well, at least all the seedy ones, including the Roadkill Grill.

### **Stu the Biker**

Stu and his pals are kind and caring: they're kind of big and they only seem to care that you do what they

want. When you talk to Stu, remember that discretion is often the best policy.

### **Chops Felton**

Chops is a great technical guitar player, but he's never figured out that music is more than just playing notes: he still doesn't understand why everyone always liked Lloyd's playing better than his. His own ego is his worst enemy, and you can use that against him in a tight spot.

### **Snooky**

Snooky owns the Juke Joint, the hottest after-hours club in West Feedback. Snooky knows great music when he hears it, but he doesn't have a lot of time to sort the wheat from the chaff.

### **The Acemen**

Legendary veterans of the Chicago blues scene, these guys have been playing practically since time began. They're not looking to give music lessons, so you'd better be ready to play well for them.

### **Chuck**

Aerosmith's producer can spot real talent with a blindfold on, and he won't settle for anything less than perfection in his studio.

### **The Grand Yak**

The leader of the Fraternal Order of the Yak seems to have gotten a little confused about the difference between rock 'n' roll and "Roll Out the Barrel." But if you can get him to shut up and dance, you'll have a barrel of fun.

### **The Bus Driver**

This guy doesn't seem to be all there, but he does have a bus, so he can really be helpful when you need to get somewhere. And despite his partial mental absence, you can't put one past him when it comes to playing guitar licks.

### **Aerosmith**

You'll meet the members of Aerosmith: Steven Tyler, Joe Perry, Tom Hamilton, Joey Kramer, and Brad Whitford. They'll be your biggest fans when you're rocking and your toughest critics when you're not.

## Copyright Information

Quest for Fame uses the following music:

**Shut Up and Dance (Tyler/Perry/Blades/Shaw)**

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**Walk on Water (Tyler/Perry/Blades/Shaw)**

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## **Using the Web Site**

If you have an Internet browser, why don't you stop by our World Wide Web site? In addition to finding out about cool new products, you can get updates on things like the Virtual Music Store. You'll also find technical support updates and newsletters. The address is:

<http://www.virtualmusic.com>

## Contacting Technical Support

Before trying to reach technical support, please review this help file. Many common problems and their solutions are discussed here. In particular, check the list of common problems in the section on Troubleshooting. If you're still having difficulty, refer to the printed material that came with the software for instructions on contacting our technical-support team. Alternatively, you can check our Web site for technical and support information that is updated on a regular basis.

## Dialog-Box Help

During the installation of the Virtual Music software, many of the dialog boxes display a button labeled "Help" that allows you to get further information on the text in the boxes. If you saw some help text while you were installing that you would now like to see again, select the name of the dialog box from the list below.

- Basic Sound Test
- Change Configuration
- Continue Installation
- Corrupt SSC.DAT
- Could Not Restart Windows
- Create New Group
- Directory Cannot Be Written
- Directory Does Not Exist
- Enter Results of Sync Test
- Hear Notes
- Hear Voice
- Incorrect CD
- Installation Directory
- Installation Settings
- Invalid BLASTER Environment Variable
- Invalid Directory Path
- Invalid Drive
- Need 6 MB of RAM
- Need 10 MB Free Disk Space
- Need 256-Color Display
- Need 486 CPU
- Need 640x480 Resolution
- Need a Mouse
- Need MIDI Output Device
- Need More Disk Space
- Need Version 3.1 of Windows
- Need Version 6.2 of DOS
- Need Video for Windows 1.1
- Need Wave Output Device
- Need Windows Enhanced Mode
- Poor Video Performance (256 colors)
- Poor Video Performance (high color depth)
- Recommend 8 MB RAM
- Recommend 640 x 480 Resolution
- Recommend Permanent Swap File
- Recommend SMARTDRV.EXE
- "Skip Frames" Set Incorrectly
- Sound Card Is Not Supported
- Sound-Card Software Error
- SoundBlaster AWE32
- Sound/Video Synchronization
- Stereo or Mono
- System Configuration Problem
- Unable to Generate Musical Sound
- Video for Windows Error
- Video for Windows Not Correctly Installed
- Virtual Music Game CD Not Found

Virtual Music Installation  
VPick Not Found  
Welcome to Virtual Music!  
Windows System Error

## No Sound at All

If you have no sound at all, try the following:

1. Check to make sure that your speakers are working. Are they plugged in and turned on? Is their volume knob turned up?
2. Check to see if your sound card has a volume knob on the back. You may need to adjust this knob, if it exists, to get audible sound.
3. Check to see if the sound is working correctly. Open the Control Panel and double-click on "Sound". If the "Test" button (if you're using Windows 95, the "Test" button looks like a right-pointing arrow) is grayed out, there is some problem with your sound-card configuration, and you may need to reinstall your sound-card software. Otherwise, select CHIMES.WAV (or some other file ending with .WAV) in the right-hand list of files and click on the "Test" button. Your sound card should play a short sound. To exit, click on "Cancel" and then close the Control Panel by double-clicking on the upper left corner of the Control Panel window.
4. If you have a Compaq computer, your Media Pilot may be set up incorrectly, with the sound turned off.

To exit from this help text and resume the installation, hold down on the "Alt" key and press the "F4" key. Note that when you exit from help, you will exit from the installation so you can readjust your sound settings.

## Enter Results of Sync Test

**VERY IMPORTANT:** Synchronization problems are usually pretty obvious. If you think there *might* be a slight problem, but you're not sure, then everything is OK.

When video is playing on your computer, it is important that it be synchronized with the sound. If the synchronization is off, the result is an annoying delay that makes the video look like a bad movie. Worse still, since the Virtual Music software needs to synchronize the music you're playing, synchronization problems can make it difficult or even impossible to play the game.

You just watched a flashing dot that was supposed to beep every time it flashed. The important question is, did the beep happen at the same time as the flash? If it did, your sound card is correctly synchronized, and you should click on "Yes." If it didn't, you have a problem, and you should click on "No." If you're not sure whether it did or it didn't, click on "Try Again."

Fortunately, the Virtual Music software can compensate for this problem, and you can run a simple test to set up the game to run correctly (the video sync will still be off, but the music will be correctly synchronized). To run this test, once you get the game installed, double-click on the icon labeled "Audio Sync Adjustment" in the program group "Virtual Music Entertainment."

To exit from this help text and resume the installation, hold down on the "Alt" key and press the "F4" key.

## Need 256-Color Display

The Virtual Music software requires a 256-color (8-bit) display in order to show the graphics needed to play the game. It will also work with 16-bit and 24-bit displays, though many video cards will run too slowly in 16-bit and 24-bit modes to adequately support motion video.

Unfortunately, the default setup for video cards when installing Windows is a 16-color (4-bit) mode, also called "VGA mode." The reason for this is that when the software was first released, 8-bit displays were still a bit unusual, and Windows was intended to run on a wide variety of hardware. Your card is set up in 16-color (4-bit) mode, but unless you bought it a LONG time ago, you can reset it to 256-color (8-bit) mode to support the Virtual Music software.

The bad news is that different video cards all have slightly different methods for changing to 256-color mode. The definitive instructions for setting up your card can be found in the card's manual. However, if (like most people) you no longer have access to the manual, you can refer to the help section on [Setting Up Your Video Card](#).

To exit from this help text and resume the installation, hold down on the "Alt" key and press the "F4" key.

## Need 640x480 Resolution

The Virtual Music software requires a display with at least 640 x 480 resolution. This is because all the graphics in the game have been designed to fit in a 640 x 480 area.

Your video card is set up at a lower resolution (smaller size) than 640 x 480. The game cannot run in your present configuration because some of the graphics would not be visible on the screen. The good news is that almost every card on the market will support a resolution of 640 x 480. Unless you bought your video card a LONG time ago, you can set it to a resolution of 640 x 480 to support the Virtual Music software.

The bad news is that different video cards all have slightly different methods for changing their resolution. The definitive instructions for setting up your card can be found in the card's manual. However, if (like most people) you no longer have access to the manual, you can refer to the help section on Setting Up Your Video Card.

To exit from this help text and resume the installation, hold down on the "Alt" key and press the "F4" key.



## **Need a Mouse**

The Virtual Music games require the use of a mouse; it is not possible to play them without one because that is the only way to select objects on the screen. For example, you need to press the "Play" button on the CD player in the bedroom in order to play a song on it, and the only way to do that is by pointing at it and clicking on it with the mouse.

Mice are relatively inexpensive and very convenient. Once you have selected a mouse and purchased it, you will need to install it. You will also need to install the accompanying software.

To exit from this help text and resume the installation, hold down on the "Alt" key and press the "F4" key.

## Need MIDI Output Device

The Virtual Music software creates the sound of the guitar you're playing by using the standard Windows MIDI interface. The MIDI interface controls your sound card through the driver software that comes with it.

Some sound cards do not support MIDI; if your card is one of these, you will have to replace it with one that does in order to play the Virtual Music games. Happily, however, almost every sound card supports MIDI, so if you're having trouble, your best bet is to try reinstalling the sound-card software to ensure that it works properly.

**Windows 3.1:** You can find out whether MIDI support is available on your system by checking for the "MIDI Mapper" in the Control Panel. If the Control Panel contains an icon labeled "MIDI Mapper", then your system has MIDI support installed. You can also test to make sure the MIDI support is working correctly by playing a MIDI file. Use the File Manager to look in the WINDOWS directory for the file CANYON.MID, then double-click on that file. If the MIDI support is working correctly, your sound card will play a song.

**Windows 95:** You can find out whether MIDI support is available on your system by double-clicking on "Multimedia" in the Control Panel. Now select the "MIDI" section. If there is nothing selected in the "MIDI output" box, then MIDI support is not installed on your system.

To exit from this help text and resume the installation, hold down on the "Alt" key and press the "F4" key.

## Need Wave-Output Device

The Virtual Music software plays the game's background sounds, as well as the music that you play along with, using the standard Windows "Wave" interface. The "Wave" interface controls your sound card through the driver software that comes with it.

Some sound cards do not support "Wave"; if your card is one of these, you will have to replace it with one that does in order to play the Virtual Music games. Happily, however, almost every sound card supports "Wave", so if you're having trouble, your best bet is to try reinstalling the sound-card software to ensure that it works properly.

You can find out whether "Wave" support is available on your system by checking the "Sound" setup in the Control Panel. Double-click on the "Control Panel" icon in the "Main" program group in the Program Manager, then double-click on the "Sound" icon; if all the entries in the "Sound" dialog box that comes up are available (that is, they're not grayed out, and you can select them), then your system has "Wave" support installed. You can also test to make sure the "Wave" support is working correctly by playing a .WAV file. Use the File Manager (Windows 95 users can use Windows Explorer) to look in the \WINDOWS directory for the file CHIMES.WAV (Windows 95 keeps files that end in .WAV [digital audio files] in the \WINDOWS\MEDIA directory), then double-click on that file. If the "Wave" support is working correctly, a utility for playing "Wave" audio will run. When you click on the "Play" button in this utility, your sound card will play a short sound.

To exit from this help text and resume the installation, hold down on the "Alt" key and press the "F4" key.

## **Recommend 640 x 480 Resolution**

The Virtual Music software works best with a display whose resolution is 640 x 480, the area within which all the games' graphics have been designed to fit.

Your video card is set up for a higher resolution (that is, a larger size) than 640 x 480. The Virtual Music game will still run, but the graphics will be smaller than the screen itself and will occupy an area in the screen's upper left corner. For more enjoyable play, we recommend that you run the game with your video card set up at a resolution of 640 x 480.

The bad news is that different video cards all have slightly different methods for changing their resolution. The definitive instructions for setting up your card can be found in the card's manual. However, if (like most people) you no longer have access to the manual, you can refer to the help section on Setting Up Your Video Card.

To exit from this help text and resume the installation, hold down on the "Alt" key and press the "F4" key.

## **Stereo or Mono**

When you listen to sound, you hear it with both ears. Since your two ears are in different places on your head, each one hears something slightly different. Your brain uses this information to give you more information about the sound, such as where it is coming from and how loud it is.

The Virtual Music software takes advantage of your aural arrangement by creating slightly different guitar sounds for your left and right ear while you're playing. As a result, the guitar sound seems much more "alive" and has more interesting spatial characteristics. If you listen to only one channel, such as the left ear, however, it won't work very well because part of the guitar sound will be missing. It is therefore important that you match the sound generation with the kind of system you're using: if you play mono sound through a stereo system, it will sound "deader" than it needs to, and if you play stereo sound through a mono system, you won't be able to hear everything.

If you're using only one speaker, or a single earphone, then you're definitely listening in mono. If you're using dual headphones or two speakers, you're probably listening in stereo, though it's possible that the system is playing the same sound through both speakers, in which case it too is mono.

If you experience any of the problems mentioned above, you may need to run the installation again and change the setting from mono to stereo or vice versa.

To exit from this help text and resume the installation, hold down on the "Alt" key and press the "F4" key.

## Unable to Generate Musical Sound

The Virtual Music software uses your sound card to generate the guitar sounds that your VPick makes when you play. There are several different methods of generating guitar sounds, and the Virtual Music software is capable of using any of them. The installation has tried all of these methods with your sound card, but unfortunately, based on your answers about whether you could hear the sounds, it appears that none of them works.

First, you should probably try reinstalling the software that came with your sound card. If this software is not properly installed, the sound card will not work correctly. You may also want to check the connection to the speakers to make sure that they are powered up and working. Does any other software generate sound correctly?

Please note that playing audio CDs (music CDs) is very different from playing CD-ROM games such as the Virtual Music games. The sound card is not used to generate the sound from audio CDs, so even if you can hear music from such disks, there may be something wrong with your sound-card setup.

If you're still having trouble, refer to the [troubleshooting section](#) on diagnosing sound problems.

If you're unable to produce any guitar sounds no matter what you do, you may need to get a different kind of sound card and install it on your system.

To exit from this help text and resume the installation, hold down on the "Alt" key and press the "F4" key.

## Technical Information

This section contains specific technical information that is not required for use of the Virtual Music software but may be helpful and informative for knowledgeable computer users.

**Contents of VMUSIC.INI**

**Details of VPick Connection**

**Changes Made by Installation**

**Using the Utilities in the TEST directory**

**Updating SSC.DAT**

**Using the Web Site**

**Using the Virtual Guitar with the Game**

## Contents of VMUSIC.INI

The VMUSIC.INI file is in the same directory as the executable (VMUSIC.EXE) and contains configuration information for the executable.

For readability, this description is in two parts. The first part is just a listing of all the sections and entries, with default values given for all the entries. The second part is a more detailed description of each entry.

### Listing and Default Values

```
[Devices]
OutputDevice=XXX
WVAlg=999
MVAlg=999
CVAlg=999
OVALg=999
WVPar=999
MVPar=999
CVPar=999
OVPar=999
WIVol=999
MIVol=999
CIVol=999
OIVol=999
Flags=999
Transpose=-12
MIDIFeedbackPatch=76
SSCEntry=XXX
InputDevice=XXX
MOutID=999
WOutID=999

[VMPParallel]
Port=XXX
PortIRQ=999

[VPick]
Debounce=60

[Installation]
Which=XXX
Memory=999
CPU=999
TimeWarp=999
PitchBendBias=999
VFWCorrection=0
LoadClips=XXX
LoadBigBitmaps=XXX
SuppressRepaint=XXX
Group=XXX
CDPath=XXX

[VMSB]
Type=XXX
Stereo=XXX
Port=999
```



OPL3s1=XXX  
OPL3m1=XXX  
OPL2-1=XXX  
OPL2x2s1=XXX  
OPL2x2m1=XXX  
AWEs1=XXX  
AWEm1=XXX

## Detailed Description

**[Devices] section:** describes the input and output devices

### OutputDevice

SoundBlaster: use the Virtual Music SoundBlaster family driver  
GeneralMIDI: use the MIDI output device whose ID is given in MOutID  
SBAWE32: use Virtual Music AWE32 support

WVAlg  
MVAAlg  
CVAAlg  
OVAAlg

Describes the algorithms used by the game when controlling the volume of the wave audio device, music device (MIDI or Virtual Music SoundBlaster driver), CD audio, and master volume.

WVPar  
MVPar  
CVPar  
OVPar

Algorithm-dependent volume control parameters.

WIVol  
MIVol  
CIVol  
OIVol

Initial volume settings (0-1000) for the above devices.

### Flags

Flag bits indicating special conditions concerning the sound card and drivers. Bit 0 (LSB) on indicates that the sound synchronization will be correct. Bit 1 on indicates that pitch bend and pitch bend range are correctly implemented in the MIDI driver. Bit 2 on indicates that the sound driver will correctly allow external mixer settings to be read by the sound adjustment screen in the game.

### Transpose

A signed integer that indicates how many steps to shift each note. For example, -12 shifts one octave down.

### MIDIFeedbackPatch

The General MIDI patch number that should be used for guitar feedback sound.

### SSCEntry

If the installation procedure is unable to find your system sound card in the file of known sound-card information (SSC.DAT), it uses information gathered during the installation and builds a new SSC.DAT entry. The entry is stored here rather than in SSC.DAT because in the event that the entry is wrong, putting it into the file could prevent future installations from working correctly.

### InputDevice

ParallelPick: Use the VPick connected to a parallel (LPT) port  
SerialPick: Use the VPick connected to a serial (COM) port

### MOutID

The device ID of the device to use for MIDI output. Device IDs start at zero and represent the offset in the list generated by the CARD program.

### WOutID

Reserved for future use.

**[VMPParallel] section:** parameters associated with the parallel (LPT) port

Port

The parallel port to which the VPick is connected (such as LPT1).

PortIRQ

The IRQ used by the parallel port listed in "Port".

**[VPick] section:** parameters associated with the VPick

Debounce

The number of milliseconds to allow for the sensor in the VPick to settle after each strum.

**[Installation] section:** information from installation program

Which

A short identifier that specifies which game this INI file is for.

Memory

Amount of memory in system in Mbytes.

CPU

CPU type. 2 = 80286, 3 = 80386, 4 = 80486

TimeWarp

PitchBendBias

Used to correct for sound-card speed irregularities.

VFWCorrection

A fixed time expressed in milliseconds to correct for sound-card time offsets. A positive value delays the Virtual Music relative to the digitized audio; a negative value advances it.

LoadClips

LoadBigBitmaps

Whether or not to keep decompressed background data in memory. If you observe backgrounds being drawn very slowly during song play, causing audio gaps, try setting these to "No" to see if it fixes the problem.

SuppressRepaint

Whether or not to correct for behavioral differences between different versions of Video for Windows. If the drunks don't stay passed out in the Polyester Lounge, try setting this to "Yes" to see if it fixes the problem.

Group

The program group into which the installation put the Virtual Music program icons.

CDPath

The path to the CD-ROM drive used for the Virtual Music game.

**[VMSB] section:** parameters for SoundBlaster DLL (VMSB.DLL)

Type

OPL3 (for regular OPL3) or OPL3AWE (for AWE32 cards)

Stereo

Yes means take advantage of stereo; No means make sure you hear everything even if you have only one speaker on one channel.

Port

Base address of sound card, in hexadecimal (e.g., 220).

OPL3s1

OPL3m1

OPL2-1

OPL2x2s1

OPL2x2m1

AWEs1  
AWEm1

Filenames of synthesis data files.

## **Details of VPick Connection**

The VPick connector is a male 25 pin DSub connector. All pins are present on the connector, but the pins that are actually used by the VPick are numbers 2, 3, 10, and 12. Additionally, one of pins 18 through 25 must be connected to ground (these pins are connected together in the VPick connector).

## Changes Made by Installation

The number of changes that the Virtual Music installation procedure makes to your system has been held to a minimum to facilitate easy removal. The following information is provided to help you if you decide to do this.

Files that the installation procedure copies to your hard disk:

Into the game directory (default C:\VMUSIC\QF2)

VMUSIC.EXE	Game execution program
VMUSIC.INI	Parameter file for VMUSIC.EXE
QF2.HLP	Help file for "Quest for Fame" and Virtual Music products
GAME.GSQ	Compiled game script
PARTY.GSQ	Compiled game script for "Open Access" mode
VMSTORE.GSQ	Compiled game script for "Virtual Music Store"
MIDIGET.DLL	The note-generation module
VMSERIAL.DLL	Peripheral-communication module
VMSB.DLL	Driver for SoundBlaster-compatible sound cards
SSC.DAT	Sound-card information database
*.FM	Support files used by VMSB.DLL

(These two files are copied only if your system has a SoundBlaster AWE32 card)

VG02.SBK	Support file for SoundBlaster AWE32
VG02N.SBK	Support file for SoundBlaster AWE32

Into the Windows directory (usually C:\WINDOWS)

VMGPATHS.INI	Paths to installed Virtual Music products
VMINST.CKP	Contains information for restarting installation
VMINST.ERR	Contains text from any system error during installation

Changes to INI files:

CONFIG.SYS

The Virtual Music installation procedure does not change CONFIG.SYS.

AUTOEXEC.BAT

The Virtual Music installation procedure does not change AUTOEXEC.BAT.

SYSTEM.INI

The Virtual Music installation procedure does not change SYSTEM.INI.

WIN.INI

If the installation procedure detects that the Video for Windows "Skip video frames if behind" setting is disabled on your system, you will be given the option to enable it. If you do, the installation will set "SkipFrames=1" in the [MCI\AVI] section. If you do not select this item, the Virtual Music installation procedure will not change WIN.INI.

## **Using the Utilities in the TEST Directory**

The \TEST directory on CD #1 contains several useful utilities for diagnosing problems and fine-tuning system performance. Here are the utilities you will find there:

**Using the CARD Program to Test Sound Cards**

**Using the COMTEST Program to Diagnose Ports**

**Using the PICKTEST Program to Test the VPick**

**Using the CPUSPEED Program to Measure the CPU**

## Updating SSC.DAT

If you have an update to the sound-card database SSC.DAT, either from the [Web site](#) or from the output of [CARD](#), you can use the newer SSC.DAT to guide the installation through the sound-card testing. The installation will check to see if the SSC.DAT file is in the target directory and use the one it finds there instead of the one on the CD. So just be sure to create the directory where you want to install the game, and put the new SSC.DAT into that directory before you start the installation. Alternatively, if you have already installed the game and you are having trouble with sound card settings, you can copy the updated SSC.DAT file into the directory where you installed the game, then double-click on the "Change Settings" icon and select the box labeled "Sound card has changed." The installation will then use the new SSC.DAT settings to configure the game for your sound card.

## **Using the Web Site**

If you have an Internet browser, why don't you stop by our World Wide Web site? In addition to finding out about cool new products, you can get updates on things like the Virtual Music Store. You'll also find technical support updates and newsletters. The address is:

<http://www.virtualmusic.com>



## Using a Virtual Guitar with the Game

If you already own a Virtual Guitar, you can use it with the game. You will, however, need to make a few minor changes--follow the steps below:

1. Make sure that the Virtual Guitar is connected and working properly with the game that came with it.
2. You will now need to use a text editor to copy some of the entries from the file \WINDOWS\VMUSIC.INI into the file VMUSIC.INI in the directory where your new VPick game is installed (for example, in \VMUSIC\QF2). Copy the section that starts with "[VMSerial]" and ends with a blank line, and put it at the end of the VMUSIC.INI for the VPick game. In the same way, copy the section that starts with "[Guitar]" and ends with a blank line. (These changes configure the Virtual Guitar to work the same way it did in the old game.)
3. Use the text editor in the VMUSIC.INI for the VPick game to find the section titled "[Devices]." In that section, find the line "InputDevice=ParallelPick" and change it to "InputDevice=Serial" (this change sets up the game to use the Virtual Guitar instead of the VPick).
4. You should now be able to play the new game with the Virtual Guitar. The sound screen will still be active and functional, but you can also adjust guitar-sound parameters during song play using the controls on the Virtual Guitar.

In this document, "Windows" is used to refer to the Microsoft® Windows™ operating environment, and "DOS" is used to refer to both the MS-DOS™ and the PC-DOS™ operating systems.

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## Copyright Information

Quest for Fame uses the following music:

**Shut Up and Dance (Tyler/Perry/Blades/Shaw)**

© 1992 Swag Song Music, Inc. / Tranquility Base Songs administered by WB Music Corp. (ASCAP) / Ranch Rock Music administered by Warner Tamerlane Publishing Corp. (BMI). From the Geffen album GET A GRIP.

**Eat the Rich (Tyler/Perry/Vallance)**

© 1992 Swag Song Music, Inc. / Testatyme Music / Almo Music Corp. (ASCAP). From the Geffen album GET A GRIP.

**Dude (Looks Like a Lady) (Tyler/Perry/Child)**

© 1987 Aero Dynamics Music Publishing, Inc. / EMI April Music Inc. / Desmobile Music Co., Inc. (ASCAP). From the Geffen album PERMANENT VACATION.

**Livin' on the Edge (Tyler/Perry/Hudson)**

© 1992 Swag Song Music, Inc. / MCA Music Publishing, a division of MCA Inc. / Beef Puppet Music (ASCAP). From the Geffen album GET A GRIP.

**Love in an Elevator (Tyler/Perry)**

© 1989 Swag Song Music, Inc. (ASCAP). From the Geffen album PUMP.

**Walk on Water (Tyler/Perry/Blades/Shaw)**

© 1992 Swag Song Music, Inc. / Tranquility Base Songs administered by WB Music Corp. (ASCAP) / Ranch Rock Music administered by Warner Tamerlane Publishing Corp. (BMI). From the Geffen album BIG ONES.

**Born to Be Wild (Bonfire)**

© 1968 Music Corporation of America, Inc. (BMI).

**What's Your Name (Rossington, Van Zant)**

© 1977 Duchess Music Corporation (BMI).

Certain compositions © Notable Productions, 1994, 1995.

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**WARNING:** "It is a violation of Federal Copyright Law to synchronize this MULTIMEDIA DISK with video tape or film, or to print this MULTIMEDIA DISK in the form of standard music notation without the express written permission of the copyright owner."

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IN THE UNITED STATES PATENT AND  
TRADEMARK OFFICE

In re Patent of: GIBSON GUITAR CORP.

Patent No.: 5,990,405

Issue Date: NOVEMBER 23, 1999

Inventor: AUTEN et al.

Title: SYSTEM AND METHOD FOR  
GENERATING AND CONTROLLING A  
SIMULATED MUSICAL  
PERFORMANCE

DECLARATION OF TODD FITZSIMMONS IN SUPPORT OF REQUEST FOR  
EX PARTE REEXAMINATION OF U.S. PATENT NO. 5,990,405

I, Todd Fitzsimmons, declare and state:

1. I am an attorney at O'Melveny & Myers LLP. I make this Declaration pursuant to M.P.E.P. § 2258(I)(E) and in support of the Request for *Ex Partes* Reexamination of U.S. Pat. No. 5,990,405 ("Request for Reexamination").

2. Based on information and believe, it is my understanding that Virtual Music Entertainment distributed (*e.g.*, marketed and sold) the Quest for Fame software in 1995. The Quest for Fame software is a music video game for use with a home computer and a virtual music instrument (*e.g.*, VPick or Virtual Guitar). The Quest for Fame software included, in part, an executable file (*i.e.*, to load the Quest for Fame video game onto the home computer) and a Virtual Music Help ("VMH") document. The VMH document included, for example, a description of the Quest for Fame video game.

1           3.     Exhibit 6 to the Request for Reexamination includes true and accurate  
2     copies of (A) the Quest for Fame packaging (as displayed on store shelves), bearing  
3     a copyright date of 1995 (*see* Exhibit 6, page 1), (B) the Quest for Fame CD-  
4     ROMs, bearing a copyright date of 1995 (*see* Exhibit 6, page 2), and (3) selected  
5     pages from the VMH document, bearing copyrights dates 1993, 1994 and 1995 (*see*  
6     Exhibit 6, pages 3-54).

7  
8           4.     Based on information and believe, it is my understanding that the  
9     Quest for Fame software, including the VMH document, was distributed in 1995.  
10    This is supported, for example, by the copyright dates on the packaging, the CD-  
11    ROMs, and the VMH document. *See* Exhibit 6, pages 1, 2 and 54. The Quest for  
12    Fame software was also discussed in several articles that were published in 1994-  
13    1996. *See, e.g., In re Epstein*, 32 F.3d 1559 (Fed. Cir. 1994) (Database printouts of  
14    abstracts were properly relied on as evidence that the software products referenced  
15    therein were “first installed” or “released” more than one year prior to applicant’s  
16    filing date.”) and M.P.E.P. § 2128.

17  
18          5.     Exhibit 5 to the Request for Reexamination is a true and correct copy  
19    of an article published by the Washington Post on January 20, 1995, titled “Virtual  
20    Guitar adds realism to musical fantasies.” The Washington Post article discusses  
21    the Quest for Fame software. *See, e.g., p. 2* (“Other CDs which included the  
22    ‘JamPak’ technology include ‘Quest for Fame: Featuring Aerosmith’ and  
23    ‘Welcome to West Feedback II.’”).

24  
25          6.     **Exhibit A** to this Declaration is a true and correct copy of an article  
26    distributed by Business Wire on August 2, 1995, titled “Ahead Inc. changes name  
27    to Virtual Music Entertainment Inc.” The article discusses the Quest for Fame  
28    software. *See, e.g., p. 1* (“Underscoring the potential popularity of the new ‘Quest


1 for Fame' title, the company announced earlier this month that it had entered into  
2 an exclusive distribution and licensing agreement with IBM(R).").

3  
4 7. **Exhibit B** to this Declaration is a true and correct copy of an article  
5 published by Entertainment Weekly on February 3, 1995, titled "Rock & Roll  
6 Fantasy." The Entertainment Weekly article discusses the Quest for Fame  
7 software. *See, e.g.*, p. 1 ("So maybe I'm not the best person to offer an informed  
8 assessment of Virtual Guitar (Ahead, \$99.95), its accompanying CD-ROM game  
9 Welcome to West Feedback, and the separately sold next level, Quest for Fame:  
10 featuring Aerosmith (Ahead, CD-ROM for PC, \$79.95).").

11  
12 8. **Exhibit C** to this Declaration is a true and correct copy of an article  
13 published by the Boston Herald on January 28, 1996, titled "Live on edge with  
14 virtual air guitar," The Boston Herald article discusses the Quest for Fame  
15 software. *See, e.g.*, p. 1 ("Air guitar is already virtual, but Quest for Fame is the  
16 wired, karaoke version for any preteen to early-20s rock star wannabe.").

17  
18 9. **Exhibit D** to this Declaration is a true and correct copy of an article  
19 published by the USA Today on December 19, 1994, titled "Add creativity to your  
20 computer/Play out your rock 'n' roll fantasy." The USA Today article discusses the  
21 Quest for Fame software. *See, e.g.*, p. 1 ("Quest for Fame dangles the ultimate  
22 carrot: a guest gig with Aerosmith.").

23  
24 I declare under penalty of perjury under the laws of the United States that the  
25 foregoing is true and correct. Executed this 24<sup>th</sup> date of April 2008, at Los Angeles,  
26 California.

27  
28   
\_\_\_\_\_  
Todd Fitzsimmons

**EXHIBIT A**

**EXHIBIT A**



2 of 6 DOCUMENTS

Copyright 1995 Business Wire, Inc.  
Business Wire

August 2, 1995, Wednesday

**DISTRIBUTION:** Business Editors and Computer Industry Writers**LENGTH:** 606 words**HEADLINE:** Ahead Inc. changes name to Virtual Music Entertainment Inc.**DATeline:** BEDFORD, Mass.**BODY:**

August 2, 1995--Asserting that the era of virtual music entertainment was at hand, Ahead Inc., the pioneering creators of the revolutionary Virtual Guitar, today announced that, effective immediately, it was changing its name to Virtual Music Entertainment Inc. According to corporation president and chief executive officer Bradley J. Naples, the new name more accurately reflects the company's core mission to produce ground-breaking multimedia productions featuring major music acts in a series of rock and roll adventures that incorporate the company's proprietary interactive virtual music technology. "The Virtual Guitar revolutionized the CD-ROM entertainment industry," Naples said today. "It was the first, and remains the only, virtual music entertainment that allows consumers to directly interact with their favorite rock and roll music in a challenging series of scenes that promotes healthy, non-violent competition among teenage game enthusiasts." The success of the original Virtual Guitar title, which was shipped last December, led to the introduction of "Quest For Fame," featuring the phenomenally popular band Aerosmith. Last month, at the E3 trade show in Los Angeles, the company debuted its next generation virtual interface--the Virtual Pick, or VPick. New VPick Interface promises to bring Virtual Music to the masses: The patent-pending VPick fits comfortably into the hand of either a right- or left-handed player. The consumer then cradles the VPick in his or her hand and simply strums it against any solid surface--such as a tennis racket, tabletop, broom, baseball bat, or even a belt buckle! The VPick senses the resistance, using internal switching technology, and translates the signal into guitar sounds that are played back through the computer. The VPick is compatible for use on the company's entire virtual music product line, which includes "Quest For Fame," "Welcome To West Feedback I," and "Welcome To West Feedback -- The Second Set." The VPick will also be compatible with all future titles introduced by the company. IBM(R) distribution and licensing agreement expands market reach: Underscoring the potential popularity of the new "Quest For Fame" title, the company announced earlier this month that it had entered into an exclusive distribution and licensing agreement with IBM(R). Under the terms of the agreement, IBM now has the exclusive North American, South American, and European distribution and licensing rights to the "Quest For Fame" PC CD-ROM title. "We believe that, with IBM's marketing support, the "Quest For Fame" CD-ROM will help to usher in the era of virtual music entertainment," Naples said today. "This is a period of music entertainment that promises to do for the PC what MTV did for music television in the 1980's." Headquartered in Bedford, Massachusetts, Virtual Music Entertainment Inc. is a leading developer and marketer of interactive virtual music CD-ROMs and accessories for both multimedia PC and Macintosh personal computers. The company's entire virtual music product line is designed to provide musicians and non-musicians the thrill of performing on stage through sophisticated real-time processing and high-quality video, animation, and studio-like sounds. The privately held company was formed in 1993.

IBM is a registered trademark of the International Business Machines Corporation.

Ahead Inc. changes name to Virtual Music Entertainment Inc. Business Wire August 2, 1995, Wednesday

CONTACT: Griffin Public Relations & Marketing  
Bob Griffin, 212/255-8491

**LOAD-DATE:** August 3, 1995

**EXHIBIT B**

**EXHIBIT B**

## DIGITAL REVIEW

## ROCK &amp; ROLL FANTASY

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When I  
my best  
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ad,

ROM game Welcome to West Feedback, and the separately sold next  
Aerosmith (Ahead, CD-ROM for PC, \$79.95). Then again, the apparent  
appears to be 14-year-old males with no ax experience whatsoever, so  
Virtual Guitar is about as satanically alluring as any high-tech toy could  
sleazy body festooned with spongy yellow controls and topped off with a  
Eddie Van Halen might whip out during an encore to make the back-  
closer inspection reveals that this isn't so much a guitar as an insanely  
frets; the strings don't even go up the neck. The strings, in fact, are one  
This guitar doesn't plug into an amp, either-it feeds into a multimedia  
West Feedback is to play the Virtual Guitar well enough to progress from  
with a garage band to toplineing at one of West Feedback's finer dives.  
me, takes you from bar-band glory to grandstanding with Aerosmith at  
sense isn't needed so much as hand-eye coordination-you match your  
pattern of spikes on a Rhythm EKG monitor; eventually, even that  
and you have to rely on memory. As glorified arcade games, Feedback and  
available songs are mostly brain-dead lite-metal fodder (Motley Crue's  
about the characterizations of band mates, agents, and rivals are  
even Tyler and Joe Perry appear throughout Fame), the production is  
skilled timing to nail the beat. But how does the Virtual Guitar fare as a  
one thing, you just hit the strings and the computer picks the chord. But  
the 14-year-old poor musicianship? There's only one person in the  
would know, and that's Carlos. Carlos works in the imaging lab, where  
He only wears black, sports frizzy hair down to his butt, and has  
he heard Kansas' "On the Other Side" when he was 18. Before he came  
-metal band called Iron Skull, playing Iron Maiden, Ozzy, and Megadeth  
him into my office and hand him the guitar and the supplied neon yellow  
pick at all times. As I start up the game, he glares with lupine scorn at  
here?" he growls during Feedback's first scene. "I don't know which  
some rapid grace notes, but since they're not where the game wants  
the dawn: "It's just like a point-and-shoot game." Once Carlos starts

ke with ease. But he's still ticked off. "This teaches only one hand," he  
cenes. "You don't learn alternate picking. You don't learn sweet picking.  
o is strum. That's one one-hundredth of what you need to know about  
to become adept at matching rhythms, though, Carlos thinks Virtual  
e a good drummer. So you've got a multimedia reviewer who thinks this  
semi-pro guitar player who thinks it's a pretty crappy guitar. Neither of  
instead, the Virtual Guitar was explicitly designed to tap into millions of  
s. Unfortunately, it could ensure that they stay fantasies. C+

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Posted Feb 03, 1995



12 of 21 DOCUMENTS

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The Boston Herald

January 28, 1996 Sunday SECOND EDITION

**SECTION:** LIFESTYLE; Pg. 052

**LENGTH:** 656 words

**HEADLINE:** Live on edge with virtual air guitar

**BYLINE:** By Anders and Zangers

**BODY:**

Rating:

(best is five stars)

Title: Quest for Fame

Publisher: IBM Corp. (800) 426-7235

Format: Windows (a Mac version is planned)

Price: About \$ 50

Ages: 11 to 46

It makes us nervous when software is just a virtualized version of something better in the real world, such as children's books, imaginary friends or going to the zoo. But sometimes you can have a virtualized experience that is neater and safer than the real thing, so we don't mind our kids keeping their joy rides or karate tournaments on the computer screen.

Air guitar is already virtual, but Quest for Fame is the wired, karaoke version for any preteen to early-20s rock star wannabe. And watch out for mom and dad.

This two-CD-ROM product starts out in a virtual kid's room: bed unmade, clothing on the floor and walls plastered with posters. In a corner, a stereo crackles and sparks, while from a TV set, one of the coolest kids you can imagine practically dares you to turn on the stereo and begin.

As you click the mouse on the stereo, things start happening. The cool kid leaves the TV set, walks in the door and tells you that good guitarists are as common as bugs, and unless you want to end up like a mosquito in a bug zapper, you better practice. Then the opening riffs of Aerosmith's "Eat the Rich" thunder through the room.

But you're prepared because you've plugged the "virtual pick" into the computer's parallel port and you're itching to jam. Jammin' works like this: As a song plays on the computer, you strum your virtual pick on a tennis racket, pants leg (corduroys are best), unstrung guitar, plastic assault rifle, broom or whatever. Do it right and your strums thunder through the speakers in time with the music, sort of like heavy-metal karaoke. The room on the screen comes alive, the posters start dancing and you gain points. The rock 'n' roll fantasy has begun.

The object is to play Aerosmith songs so well that you garner enough points to get out of your bedroom, through the garage-rehearsals, past the seedy roadside bar, the cheesy lounge and other sites, until you've gotten even with everybody who ever laughed at you. You're about to jam with Aerosmith in a packed stadium, and if you don't perform well, you'll be jeered at and scorned.

Playing the virtual pick is challenging and even moderately educational: It teaches timing and rhythm, two essential skills for any musician. Non-musicians will gain a new appreciation for rock 'n' roll musicians' skills. It's not all makeup and mosh pits. In this game, you find out how hard it is to strum in time. The dudes in Foo Fighters actually have to, like, play notes.

Created by Virtual Music Entertainment in Andover, Quest for Fame has had dues to pay. You may recall seeing last year's version - the realistic-looking, plastic Virtual Guitar - in stores. Distribution problems and technical troubles forced the developer to come up with a less cumbersome piece of hardware. Thus, the handy and attractive virtual pick.

A word of caution: This simple-looking package hides a lot of innovative, sophisticated technology, the likes of which often come with technical problems. This title uses video and the full capabilities of your computer's sound card. So if everything isn't tuned right (and once you've installed several CD-ROMs, it often isn't), you can expect to reconfigure things.

Fortunately, IBM Technical Support is friendly, knowledgeable and maintains good hours.

By the way, this product takes the next step in fun, interactive entertainment. It's exciting to see a Boston-area operation produce such a promising product in a market so heavily dominated by West Coast outfits. And though it's geared toward adolescents, Quest for Fame can satisfy just about anyone's urge to bring the crowd to its feet. So what are you waiting for? Strap on that squash racket and "Dream On."

Richard Anders is author of "The Anders CD-ROM Guide."

**LOAD-DATE:** January 28, 1996



**EXHIBIT D**

**EXHIBIT D**

1 of 1 DOCUMENT

Copyright 1994 Gannett Company, Inc.  
USA TODAY

December 19, 1994, Monday, FINAL EDITION

**SECTION:** LIFE; Pg. 6D

**LENGTH:** 309 words

**HEADLINE:** Add creativity to your computer / Play out your rock 'n' roll fantasy

**BYLINE:** Bruce Schwartz

**BODY:**

The Virtual Guitar (\$ 99.95, from Ahead) is the closest you'll get to playing headbanging guitar with absolutely no talent.

The garish Virtual Guitar, with most of the weight and feel of a Fender Stratocaster, is just an innovative joystick. Its coiled cord plugs into a serial port on the back of your PC. The installation software seamlessly senses its presence and sets up everything.

Buttons on the guitar's body control volume, distortion, feedback and the onscreen cursor. But the frets are fake, and the strings sense only rhythm. The CD-ROM software (Welcome to West Feedback is included; other titles include Quest for Fame With Aerosmith, \$ 79.95) knows what notes to play when you hit the strings; all you do is keep the right rhythm.

The plot of West Feedback is simple: To play your way up from your bedroom to a garage band, to the Roadkill Grille biker bar, to the Barrelhouse blues club, to the recording studio, and finally to the Humongodome.

Along the way, you hit derisive or appreciative crowds, showdowns with a local guitar legend, admiring (or disdaining) glances from dancing women (this game is definitely aimed at boys). Quest for Fame dangles the ultimate carrot: a guest gig with Aerosmith.

The whole system is amazingly trouble-free and responsive, and offers a convincing illusion of guitar-playing. The video clips are high-quality and add to the onstage experience. Virtual Guitar is dream fulfillment for current (or former) pimply male adolescents.

Also: If you're more lounge lizard than headbanger, Reveal's MusicStar package (Windows, disk or CD, \$ 99) gives you a three-octave mini keyboard synthesizer (with keys a tad too tiny for thick adult fingers). It plugs into most soundboards. Jam with blues, jazz or swing accompaniment; take personal lessons; or record your own four-track sessions.

**GRAPHIC:** PHOTO, b/w

**LOAD-DATE:** December 20, 1994

**EXHIBIT 8**

**EXHIBIT 8**

**IN THE UNITED STATES DISTRICT COURT  
FOR THE MIDDLE DISTRICT OF TENNESSEE  
NASHVILLE DIVISION**

<b>GIBSON GUITAR CORPORATION</b>	)	
	)	
<b>Plaintiff,</b>	)	
	)	<b>Civil Action No:</b>
<b>v.</b>	)	
	)	<b>Jury Demand</b>
<b>HARMONIX MUSIC SYSTEMS, INC.;</b>	)	
<b>MTV NETWORKS (a division Viacom</b>	)	
<b>International, Inc.); and ELECTRONIC</b>	)	
<b>ARTS, INC.,</b>	)	
	)	
<b>Defendants.</b>	)	
	)	
	)	

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**COMPLAINT AND DEMAND FOR JURY TRIAL**

---

Plaintiff, Gibson Guitar Corporation, complaining of the Defendants herein, demands a jury trial and alleges as follows:

**THE PARTIES**

1. Plaintiff, Gibson Guitar Corporation (“Gibson” or “Plaintiff”), is a corporation organized and existing under the laws of the State of Delaware, having its principal place of business at 309 Plus Park Boulevard, Nashville, TN 37217.

2. Upon information and belief, Defendant Harmonix Music Systems, Inc. (“Harmonix”) is a corporation organized under the laws of the State of Delaware, having its principal place of business at 625 Massachusetts Avenue, Cambridge, MA 02139.

3. Upon information and belief, Defendant MTV Networks (“MTV”) is a division of Viacom International, Inc., which is a corporation organized under the laws of

the State of Delaware, having its principal place of business at 1515 Broadway, New York, NY 10036.

4. Upon information and belief, Defendant Electronic Arts, Inc. ("EA") is a corporation organized under the laws of the State of Delaware, having its principal place of business at 209 Redwood Shores Parkway, Redwood City, California 94065.

5. Harmonix, MTV, and EA are collectively referred to herein as "Defendants."

### **JURISDICTION AND VENUE**

6. This Court has subject matter jurisdiction of this action under 28 U.S.C. §§1331, 1338(a) and 35 U.S.C. §271 et seq.

7. This Court has personal jurisdiction over Harmonix by reason of its presence in the State of Tennessee, its sufficient contacts to the State of Tennessee and/or because Harmonix has committed and continues to commit, has contributed and continues to contribute to, and has induced and continues to induce acts of patent infringement in this district and throughout the United States as alleged in this Complaint. Venue in the Middle District of Tennessee is proper under 28 U.S.C. §§ 1391(b), 1391(c) and 1400(b).

8. This Court has personal jurisdiction over MTV by reason of its presence in the State of Tennessee, its sufficient contacts to the State of Tennessee and/or because MTV has committed and continues to commit, has contributed and continues to contribute to, and has induced and continues to induce acts of patent infringement in this

district and throughout the United States as alleged in this Complaint. Venue in the Middle District of Tennessee is proper under 28 U.S.C. §§ 1391(b), 1391(c) and 1400(b).

9. This Court has personal jurisdiction over EA by reason of its presence in the State of Tennessee, its sufficient contacts to the State of Tennessee and/or because EA has committed and continues to commit, has contributed and continues to contribute to, and has induced and continues to induce acts of patent infringement in this district and throughout the United States as alleged in this Complaint. Venue in the Middle District of Tennessee is proper under 28 U.S.C. §§ 1391(b), 1391(c) and 1400(b).

### **GENERAL ALLEGATIONS**

10. Plaintiff Gibson is engaged in the business of developing, manufacturing and selling, musical instruments and related equipment and systems, including but not limited to electric guitars and acoustic guitars under the famous trademark Gibson® as well as other trademarks.

11. Gibson has been in the business of making guitars for over one hundred years. Gibson guitars are sold worldwide, have worldwide recognition and have won awards for their design.

12. Gibson is also engaged in the business of developing, manufacturing and selling, selling music playing devices, systems and amplifiers, under various trademarks, but most notably, under the famous Wurlitzer® trademark.

13. Gibson is the sole owner of United States Patent No. 5,990,405 entitled “System And Method For Generating And Controlling A Simulated Musical Concert Experience,” which issued on November 23, 1999 (the ‘405 Patent).

14. The inventors of the '405 Patent are Don R. Auten, of Nashville, Tennessee, Richard T. Akers of Antioch, Tennessee and Richard Gembar of Mount Juliet, Tennessee.

15. The '405 Patent is directed to systems and apparatuses for electronically simulating participation in a musical performance. A copy of the '405 Patent is attached hereto at Exhibit 1 and is incorporated by reference.

### **THE INFRINGING PRODUCTS AT ISSUE**

16. Defendants have and continue to manufacture and/or sell products that infringe, contribute to the infringement of and/or induce the infringement of at least claims 1, 13-15, 25 and 28 of the '405 Patent and/or have no other substantial non-infringing uses.

#### **The Guitar Hero® Series of Products**

17. Upon information and belief, Defendant Harmonix created, developed, sold and/or induced the sale of a series of video games under the tradename, "Guitar Hero®," including but not limited to Guitar Hero® I, Guitar Hero® II, and Guitar Hero® Encore: Rock the 80s.

18. The Guitar Hero® series of video games were designed for use with various video game consoles, including but not limited to Sony Playstation® 2 and XBOX360®.

19. Various Guitar Hero® components, including but not limited to guitar style instruments, are sold separately and together with a one or more versions of the Guitar Hero® video games in a boxed set.

20. The Guitar Hero® series of video games and the Guitar Hero® components, whether sold together with the Guitar Hero® video games or separately, are collectively referred to herein as the “Guitar Hero Products.”

21. The Guitar Hero Products created, developed and sold by Defendant Harmonix infringe, contribute to the infringement of and/or induce the infringement of the ‘405 Patent.

22. Upon information and belief, Defendants sold or caused to be sold the Guitar Hero Products into this district via several retailers of video games both with websites and physical stores located in Nashville, Tennessee and other cities in this district.

**The Rock Band® Series of Products**

23. Upon information and belief, Defendant Harmonix created, developed and/or sold a series of video games under the tradename “Rock Band™.”

24. Upon information and belief, the Rock Band™ video games were developed for use with video game consoles, including but not limited to Sony Playstation® 2, Sony Playstation® 3, and XBOX360®.

25. Various Rock Band™ components, including but not limited to guitar style instruments, drums, and microphones, are sold separately and together with a one or more versions of the Rock Band™ video games in a boxed set.

26. The Rock Band™ series of video games and the Rock Band™ components, whether sold together with the Rock Band™ video games or separately, are collectively referred to herein as the “Rock Band Products.”



27. The Rock Band Products created, developed and sold by Defendant Harmonix infringe, contribute to the infringement of and/or induce the infringement of the '405 Patent.

28. Upon information and belief, Defendant MTV publishes, markets, sells, and/or induces others to sell and use the Rock Band Products, which infringe, contribute to the infringement of and/or induce the infringement of the '405 Patent.

29. Upon information and belief, Defendant EA is the exclusive distributor of the Rock Band Products and therefore sells and/or induces others to sell and use the Rock Band Products, which infringe, contribute to the infringement of and/or induce the infringement of the '405 Patent.

30. Upon information and belief, Defendants sold or caused to be sold the Rock Band Products into this district via several retailers of video games both with websites and physical stores located in Nashville, Tennessee and other cities in this district.

#### **COUNT I FOR PATENT INFRINGEMENT**

31. Plaintiff Gibson repeats and realleges each and every allegation of paragraphs 1-30 as though fully set forth herein.

32. Upon information and belief, Defendants have either directly infringed, committed contributory infringement of, or induced infringement of, and continue to directly infringe, commit contributory infringement of, or induce infringement of the '405 Patent.

33. The aforesaid past acts and continuing acts of Defendants constitute willful infringement and/or if continued will constitute willful infringement of the '405 patent.

34. The aforesaid past acts and continuing acts of Defendants are in violation of 35 U.S.C. §271 et seq. of the Patent Act.

35. Gibson has been damaged and will continue to be damaged by the aforesaid infringement unless Defendants are enjoined, preliminarily and permanently, from selling and offering for sale infringing products or otherwise inducing or contributing to the infringement of the '405 Patent. Gibson has no adequate remedy at law.

WHEREFORE, Plaintiff prays for the following relief:

- a) That the Defendants be adjudged to have infringed United States Patent No. 5,990,405;
- b) That such infringement be deemed willful where appropriate;
- c) that Defendants, their respective officers, agents, servants, employees and attorneys and all persons in active concert or in participation with them who receive actual notice of the order by personal service or otherwise, be preliminarily and permanently enjoined and restrained from infringing, contributing to infringement and inducing others to infringe the subject patent;
- d) that Plaintiff be awarded its damages by reason of Defendants infringement of the subject patent;

- e) that this case be deemed an exceptional case under 35 U.S.C. § 285 and plaintiff be awarded attorney fees and treble damages;
- f) that Plaintiff be awarded its costs and expenses including reasonable attorney fees; and
- g) that Plaintiff have such other and further relief which the Court may deem just or proper under the circumstances.

**DEMAND FOR JURY TRIAL**

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, Plaintiff Gibson hereby demands a trial by jury of all issues so triable.

Dated: Nashville, Tennessee  
March 20, 2008

Respectfully submitted,

/s/ Douglas R. Pierce  
Douglas R. Pierce (No. 010084)  
King & Ballow  
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Nashville, Tennessee 37201  
Tel: (615) 259-3456  
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OF COUNSEL:

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212-806-5400

*Attorneys for Plaintiff  
Gibson Guitar Corporation*



**IN THE UNITED STATES DISTRICT COURT  
FOR THE MIDDLE DISTRICT OF TENNESSEE  
NASHVILLE DIVISION**

<b>Gibson Guitar Corp.,</b>	)	
	)	
<b>Plaintiff,</b>	)	
	)	<b>Civil Action No. 3:08-0279</b>
<b>v.</b>	)	
	)	
<b>Wal-Mart Stores Inc., Target Corporation, Kmart</b>	)	
<b>Corporation, Sears, Roebuck &amp; Co.,</b>	)	<b>Judge Wiseman</b>
<b>Amazon.com, Inc., GameStop Corp.,</b>	)	<b>Magistrate Judge Griffin</b>
<b>Toys-R-Us, Inc., Harmonix Music Systems, Inc.,</b>	)	
<b>MTV (a division of Viacom International, Inc.),</b>	)	
<b>and Electronic Arts, Inc.,</b>	)	
	)	
<b>Defendants.</b>	)	

---

**AMENDED COMPLAINT AND DEMAND FOR JURY TRIAL**

---

Plaintiff, Gibson Guitar Corp., complaining of the Defendants herein, demands a jury trial and alleges as follows:

**THE PARTIES**

1. Plaintiff, Gibson Guitar Corp. ("Gibson" or "Plaintiff"), is a corporation organized and existing under the laws of the State of Delaware, having its principal place of business at 309 Plus Park Boulevard, Nashville, TN 37217.

2. Upon information and belief, Defendant Wal-Mart Stores Inc. ("Wal-Mart") is a corporation organized under the laws of the State of Delaware, having its principal place of business at 702 SW Eighth Street, Bentonville, Arkansas 72716.

3. Upon information and belief, Defendant Target Corporation (“Target”) is an entity existing under the laws of the State of Minnesota, with its principal place of business at 1000 Nicollet Mall, Minneapolis, Minnesota 55403.

4. Upon information and belief, Defendant Kmart Corporation (“Kmart”) is a corporation organized under the laws of the State of Michigan, with a principal place of business at 3100 W Big Beaver Road, Troy, Michigan 48084.

5. Upon information and belief, Defendant Sears, Roebuck & Co. (“Sears”) is a corporation organized under the laws of the State of New York, with a principal place of business at 3333 Beverly Rd, B2-130B, Hoffman Estates, Illinois, 60179.

6. Upon information and belief, Defendant Amazon.com, Inc. (“Amazon”) is a corporation organized under the laws of the State of Delaware, with a principal place of business at 1200 12th Avenue South, Suite 1200, Seattle, WA 98144.

7. Upon information and belief, Defendant GameStop, Corp. (“GameStop”) is a corporation organized under the laws of the State of Delaware, with a principal place of business at 625 Westport Parkway, Grapevine, TX 76051.

8. Upon information and belief, Defendant Toys-R-Us, Inc. (“Toys-R-Us”) is a corporation organized under the laws of the State of Delaware, with a principal place of business at 1 Geoffrey Way, Wayne, New Jersey 07470.

9. Wal-Mart, Target, Kmart, Sears, Amazon, GameStop, Toys-R-Us are collectively referred to herein as the “Retail Defendants.”

10. Upon information and belief, Defendant Harmonix Music Systems, Inc. ("Harmonix") is a corporation organized under the laws of the State of Delaware, with a principal place of business at 625 Massachusetts Avenue, Cambridge, MA 02139.

11. Upon information and belief, Defendant MTV Networks ("MTV") is a division of Viacom International, Inc., which is a corporation organized under the laws of the State of Delaware, with a principal place of business at 1515 Broadway, New York, NY 10036.

12. Upon information and belief, Defendant Electronic Arts, Inc. ("EA") is a corporation organized under the laws of the State of Delaware, with a principal place of business at 209 Redwood Shores Parkway, Redwood City, California 94065.

13. Wal-Mart, Target, Kmart, Sears, Amazon, GameStop, Toys-R-Us, Harmonix, MTV, and EA are collectively referred to herein as "Defendants."

#### **JURISDICTION AND VENUE**

14. This Court has subject matter jurisdiction over this action under 28 U.S.C. §§1331, 1338(a) and 35 U.S.C. §271 et seq.

15. This Court has personal jurisdiction over Wal-Mart by reason of its presence in the State of Tennessee, its sufficient contacts to the State of Tennessee and/or because Wal-Mart has committed and continues to commit, has contributed and continues to contribute to, and has induced and continues to induce acts of patent infringement in this district and throughout the United States as alleged in this Complaint. Venue in the Middle District of Tennessee is proper under 28 U.S.C. §§ 1391(b), 1391(c) and 1400(b).

16. This Court has personal jurisdiction over Target by reason of its presence in the State of Tennessee, its sufficient contacts to the State of Tennessee and/or because Target has committed and continues to commit, has contributed and continues to contribute to, and has induced and continues to induce acts of patent infringement in this district and throughout the United States as alleged in this Complaint. Venue in the Middle District of Tennessee is proper under 28 U.S.C. §§ 1391(b), 1391(c) and 1400(b).

17. This Court has personal jurisdiction over Kmart by reason of its presence in the State of Tennessee, its sufficient contacts to the State of Tennessee and/or because Kmart has committed and continues to commit, has contributed and continues to contribute to, and has induced and continues to induce acts of patent infringement in this district and throughout the United States as alleged in this Complaint. Venue in the Middle District of Tennessee is proper under 28 U.S.C. §§ 1391(b), 1391(c) and 1400(b).

18. This Court has personal jurisdiction over Sears by reason of its presence in the State of Tennessee, its sufficient contacts to the State of Tennessee and/or because Sears has committed and continues to commit, has contributed and continues to contribute to, and has induced and continues to induce acts of patent infringement in this district and throughout the United States as alleged in this Complaint. Venue in the Middle District of Tennessee is proper under 28 U.S.C. §§ 1391(b), 1391(c) and 1400(b).



19. This Court has personal jurisdiction over Amazon by reason of its presence in the State of Tennessee, its sufficient contacts to the State of Tennessee and/or because Amazon has committed and continues to commit, has contributed and continues to contribute to, and has induced and continues to induce acts of patent infringement in this district and throughout the United States as alleged in this Complaint. Venue in the Middle District of Tennessee is proper under 28 U.S.C. §§ 1391(b), 1391(c) and 1400(b).

20. This Court has personal jurisdiction over GameStop by reason of its presence in the State of Tennessee, its sufficient contacts to the State of Tennessee and/or because GameStop has committed and continues to commit, has contributed and continues to contribute to, and has induced and continues to induce acts of patent infringement in this district and throughout the United States as alleged in this Complaint. Venue in the Middle District of Tennessee is proper under 28 U.S.C. §§ 1391(b), 1391(c) and 1400(b).

21. This Court has personal jurisdiction over Toys-R-Us by reason of its presence in the State of Tennessee, its sufficient contacts to the State of Tennessee and/or because Toys-R-Us has committed and continues to commit, has contributed and continues to contribute to, and has induced and continues to induce acts of patent infringement in this district and throughout the United States as alleged in this Complaint. Venue in the Middle District of Tennessee is proper under 28 U.S.C. §§ 1391(b), 1391(c) and 1400(b).

22. This Court has personal jurisdiction over Harmonix by reason of its presence in the State of Tennessee, its sufficient contacts to the State of Tennessee and/or because Harmonix has committed and continues to commit, has contributed and continues to contribute to, and has induced and continues to induce acts of patent infringement in this district and throughout the United States as alleged in this Complaint. Venue in the Middle District of Tennessee is proper under 28 U.S.C. §§ 1391(b), 1391(c) and 1400(b).

23. This Court has personal jurisdiction over MTV by reason of its presence in the State of Tennessee, its sufficient contacts to the State of Tennessee and/or because MTV has committed and continues to commit, has contributed and continues to contribute to, and has induced and continues to induce acts of patent infringement in this district and throughout the United States as alleged in this Complaint. Venue in the Middle District of Tennessee is proper under 28 U.S.C. §§ 1391(b), 1391(c) and 1400(b).

24. This Court has personal jurisdiction over EA by reason of its presence in the State of Tennessee, its sufficient contacts to the State of Tennessee and/or because EA has committed and continues to commit, has contributed and continues to contribute to, and has induced and continues to induce acts of patent infringement in this district and throughout the United States as alleged in this Complaint. Venue in the Middle District of Tennessee is proper under 28 U.S.C. §§ 1391(b), 1391(c) and 1400(b).

#### **GENERAL ALLEGATIONS**

25. Plaintiff Gibson is engaged in the business of developing, manufacturing and selling, musical instruments and related equipment and systems, including but not limited to electric guitars and acoustic guitars under the famous trademark Gibson® as well as other trademarks.

26. Gibson has been is the business of making guitars for over one hundred years. Gibson guitars are sold worldwide, have worldwide recognition and have won awards for their design.

27. Gibson is also is engaged in the business of developing, manufacturing and selling, selling music playing devices, systems and amplifiers, under various trademarks, but most notably, under the famous Wurlitzer® trademark.

28. Gibson is the sole owner of United States Patent No. 5,990,405, entitled "System And Method For Generating And Controlling A Simulated Musical Concert Experience," which issued on November 23, 1999 (the '405 Patent).

29. The inventors of the '405 Patent are Don R. Auten, of Nashville, Tennessee, Richard T. Akers of Antioch, Tennessee, and Richard Gembar of Mount Juliet, Tennessee.

30. The '405 Patent is directed to systems and apparatuses for electronically simulating participation in a musical performance. A copy of the '405 Patent is attached hereto at Exhibit 1 and is incorporated by reference.

#### **THE INFRINGING PRODUCTS AT ISSUE**

31. Defendants have and continue to manufacture and/or sell products that infringe, contribute to the infringement of, and/or have no other substantial non-infringing uses, and/or induce the infringement of at least claims 1, 13-15, 25 and 28 of the '405 Patent.

**The Guitar Hero® Series of Products**

32. Upon information and belief, Defendant Harmonix created, developed, sold and/or induced the sale of a series of video games under the tradename, “Guitar Hero®,” including but not limited to “Guitar Hero®” (Version I), “Guitar Hero® II,” and “Guitar Hero® Encore: Rock the 80s.”

33. Upon information and belief, a third party created, developed, sold and/or induced the sale of “Guitar Hero® III, Legends of Rock.”

34. Upon information and belief, “Guitar Hero® III, Legends of Rock” shares at least some of the technology used in the “Guitar Hero®” (Version I), “Guitar Hero® II,” and “Guitar Hero® Encore: Rock the 80s” products. The series of video games sold under the tradename, “Guitar Hero®” including but not limited to “Guitar Hero®” (Version I), “Guitar Hero® II”, “Guitar Hero® Encore: Rock the 80’s,” and “Guitar Hero® III, Legends of Rock” are collectively referred to herein as the “Guitar Hero® Video Games.”

35. The Guitar Hero® Video Games were designed for use with various video game consoles, including but not limited to Nintendo® Wii™, Sony Playstation® 2, Sony Playstation® 3, and XBOX360®.

36. Among the products sold by the Retail Defendants that infringe, contribute to the infringement of and/or induce the infringement of the ‘405 Patent are the Guitar Hero® Video Games.

37. Various Guitar Hero® components, including but not limited to guitar style instruments, are sold separately and together with a one or more versions of the Guitar Hero® Video Games.

38. Various Guitar Hero® components, including but not limited to guitar style instruments, are sold together with a one or more versions of the Guitar Hero® Video Games and marketed as a Guitar Hero® “bundle.”

39. The Guitar Hero® Video Games and the Guitar Hero® components, whether sold together with the Guitar Hero® Video Games or separately, are collectively referred to herein as the “Guitar Hero Products.”

40. The Guitar Hero Products created and developed, and sold or caused to be sold by Defendant Harmonix infringe, contribute to the infringement of and/or induce the infringement of the ‘405 Patent.

41. Upon information and belief, Defendants Harmonix sold or caused the sale of the Guitar Hero Products in this district via several retailers of video games both with websites and physical stores located in Nashville, Tennessee and other cities in this district.

42. The Guitar Hero Products infringe, contribute to the infringement of and/or induce the infringement of the ‘405 Patent.

**The Rock Band® Series of Products**

43. Upon information and belief, Defendant Harmonix created, developed and/or has sold and continues to sell a video game under the tradename “Rock Band™.”

44. Upon information and belief, the Rock Band™ video game was developed for use with various video game consoles, including but not limited to Nintendo Wii™, Sony Playstation® 2, Sony Playstation® 3, and XBOX360®.

45. Among the products sold by the Retail Defendants that infringe, contribute to the infringement of and/or induce the infringement of the ‘405 Patent are Rock Band™ video game.

46. Upon information and belief, various Rock Band<sup>TM</sup> components, including but not limited to guitar style instruments, drums, and microphones, are sold separately and together with the Rock Band<sup>TM</sup> video game in a boxed set.

47. The Rock Band<sup>TM</sup> video game and the Rock Band<sup>TM</sup> components, whether sold together with the Rock Band<sup>TM</sup> video game or separately, are collectively referred to herein as the "Rock Band Products."

48. The Rock Band Products created, developed and sold by Defendant Harmonix infringe, contribute to the infringement of and/or induce the infringement of the '405 Patent.

49. Upon information and belief, Defendant MTV publishes, markets, sells, and/or induces others to sell and use the Rock Band Products, which infringe, contribute to the infringement of and/or induce the infringement of the '405 Patent.

50. Upon information and belief, Defendant EA is the exclusive distributor of the Rock Band Products and therefore sells and/or induces others to sell and use the Rock Band Products, which infringe, contribute to the infringement of and/or induce the infringement of the '405 Patent.

51. Upon information and belief, Defendants Harmonix, MTV and EA sold or caused the sale of the Rock Band Products in this district via several retailers of video games both with websites and physical stores located in Nashville, Tennessee and other cities in this district.

52. The Rock Band Products infringe, contribute to the infringement of and/or induce the infringement of the '405 Patent.

### **Infringing Sales**

53. The Guitar Hero Products and the Rock Band Products collectively referred to herein as the “Infringing Products.”

54. Upon information and belief, the Retail Defendants sold, offer for sale, and continue to sell Infringing Products in this district at least via their websites.

55. Upon information and belief, Defendants Walmart, Target, Kmart, Sears, GameStop and Toy-R-Us maintain physical stores that sold, offer for sale, and continue to sell Infringing Products in the United States including in Nashville, Tennessee and other cities in this district.

### **Audio/Visual Gaming Products**

56. The Retail Defendants also sell video displays, video game consoles, and audio equipment that can be part of systems that infringe the ‘405 Patent.

57. Upon information and belief, the Retail Defendants sold and continue to sell the Guitar Hero Products together with one or more of the following: video displays, video game consoles, and/or audio equipment.

58. Upon information and belief, the Retail Defendants also sold and continue to sell the Rock Band Products together with one or more of the following: video displays, video game consoles, and/or audio equipment.

59. The Guitar Hero Products and/or the Rock Band Products sold together with video displays, video game consoles, and/or audio equipment are collectively referred to herein as the “Audio/Visual Gaming Products.”

60. The Audio/Visual Gaming Products sold by the Retail Defendants infringe, contribute to the infringement of and/or induce the infringement of the '405 Patent.

61. Upon information and belief, the Retail Defendants sold and continue to sell the Audio/Visual Gaming Products into this district at least via their websites.

62. Upon information and belief, Defendants Walmart, Target, K-mart, GameStop and Toy-R-US maintain physical stores that sold and continue to sell the Audio/Visual Gaming Products in the United States including in Nashville, Tennessee and other cities in this district.

#### **COUNT I FOR PATENT INFRINGEMENT**

63. Plaintiff Gibson repeats and realleges each and every allegation of paragraphs 1-62, as though fully set forth herein.

64. Upon information and belief, Defendants have either directly infringed, committed contributory infringement of, or induced infringement of, and continue to directly infringe, commit contributory infringement of, or induce infringement of the '405 Patent.

65. The aforesaid past acts and continuing acts of Defendants constitute willful infringement and/or if continued will constitute willful infringement of the '405 patent.

66. The aforesaid past acts and continuing acts of Defendants are in violation of 35 U.S.C. §271 et seq. of the Patent Act.

67. Gibson has been damaged and will continue to be damaged by the aforesaid infringement unless Defendants are enjoined, preliminarily and permanently, from selling and offering for sale infringing products or otherwise inducing or contributing to the infringement of the '405 Patent. Gibson has no adequate remedy at law.



WHEREFORE, plaintiff prays for the following relief:

- a) That the Defendants be adjudged to have infringed United States Patent No. 5,990,405;
- b) That such infringement be deemed willful where appropriate;
- c) that Defendants, their respective officers, agents, servants, employees and attorneys and all persons in active concert or in participation with them who receive actual notice of the order by personal service or otherwise, be preliminarily and permanently enjoined and restrained from infringing, contributing to infringement and inducing others to infringe the subject patent;
- d) that Plaintiff be awarded its damages by reason of Defendants infringement of the subject patent;
- e) that this case be deemed an exceptional case under 35 U.S.C. § 285 and plaintiff be awarded attorney fees and treble damages;
- f) that Plaintiff be awarded its costs and expenses including reasonable attorney fees; and
- g) that Plaintiff have such other and further relief which the Court may deem just or proper under the circumstances.

**DEMAND FOR JURY TRIAL**

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, Plaintiff Gibson hereby demands a trial by jury of all issues so triable.

Dated: Nashville, Tennessee  
April 4, 2008

Respectfully submitted,

/s/ Douglas R. Pierce  
Douglas R. Pierce, BPR No. 10084  
KING & BALLOW  
1100 Union Street Plaza  
315 Union Street  
Nashville, Tennessee 37201  
(615) 259-3456

OF COUNSEL:

STROOCK & STROOCK & LAVAN LLP  
Matthew W. Siegal  
Angie M. Hankins  
Richard Eskew  
Jason M. Sobel  
180 Maiden Lane  
New York, New York 10038-4982  
212-806-5400

Attorneys for Plaintiff  
Gibson Guitar Corp.

**CERTIFICATE OF SERVICE**

I hereby certify that on this the 4th day of April 2008, a true and correct copy of the foregoing Amended Complaint was served by U.S. mail postage prepaid and properly addressed on:

- |  |  |
|--|--|
| 1. Wal-Mart Stores, Inc.<br>c/o: C T Corporation System<br>800 S. Gay Street<br>Suite 2021<br>Knoxville, TN 37929-9710 | 2. Target Corporation<br>Registered Agent: C T Corporation System<br>800 S. Gay Street<br>Suite 2021<br>Knoxville, TN 37929-9710 |
| 3. Amazon.com, Inc.<br>c/o: Corporation Service Company<br>2908 Poston Avenue<br>Nashville, TN 37203                   | 4. Toys-R-Us, Inc.<br>c/o: The Prentice-hall Corporation Systems, Inc.<br>2908 Poston Avenue<br>Nashville, TN 37203              |
| 5. GameStop, Inc.<br>c/o: C T Corporation System<br>800 S. Gay Street<br>Suite 2021<br>Knoxville, TN 37929-9710        | 6. K-Mart Corporation<br>c/o: C T Corporation System<br>800 S. Gay Street<br>Suite 2021<br>Knoxville, TN 37929-9710              |

/s/ Douglas R. Pierce



US005990405A

## United States Patent [19]

Auten et al.

[11] Patent Number: 5,990,405

[45] Date of Patent: Nov. 23, 1999

[54] SYSTEM AND METHOD FOR GENERATING  
AND CONTROLLING A SIMULATED  
MUSICAL CONCERT EXPERIENCE

[75] Inventors: Don R. Auten, Nashville; Richard T.  
Akers, Antioch; Richard Gembar, Mt.  
Juliet, all of Tenn.

[73] Assignee: Gibson Guitar Corp., Nashville, Tenn.

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[51] Int. Cl.<sup>6</sup> ..... G10H 1/36

[52] U.S. Cl. .... 84/609; 84/610; 84/634;  
84/649; 84/650

[58] Field of Search ..... 84/600-602, 609-612,  
84/622-625, 626, 633-636, 649-652, 712-714,  
477 R, 478

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Primary Examiner—William M. Shoop, Jr.

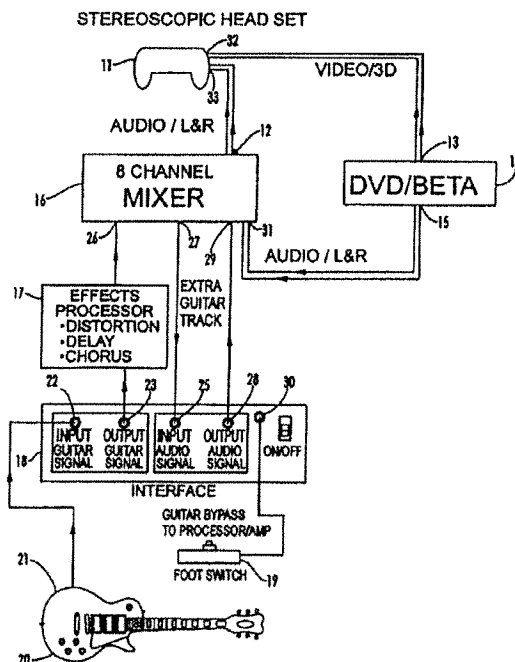
Assistant Examiner—Marlon Fletcher

Attorney, Agent, or Firm—Waddey & Patterson

## [57] ABSTRACT

A musician can simulate participation in a concert by playing a musical instrument and wearing a head-mounted 3D display that includes stereo speakers. Audio and video portions of a musical concert are pre-recorded, along with a separate sound track corresponding to the musical instrument played by the musician. Playback of the instrument sound track is controlled by signals generated in the musical instrument and transmitted to a system interface box connected to the audio-video play back device, an audio mixer, and the head-mounted display. An external bypass switch allows the musician to suppress the instrument sound track so that the sounds created by actual playing of the musical instrument are heard along with the pre-recorded audio and video portions.

30 Claims, 2 Drawing Sheets



EXHIBIT

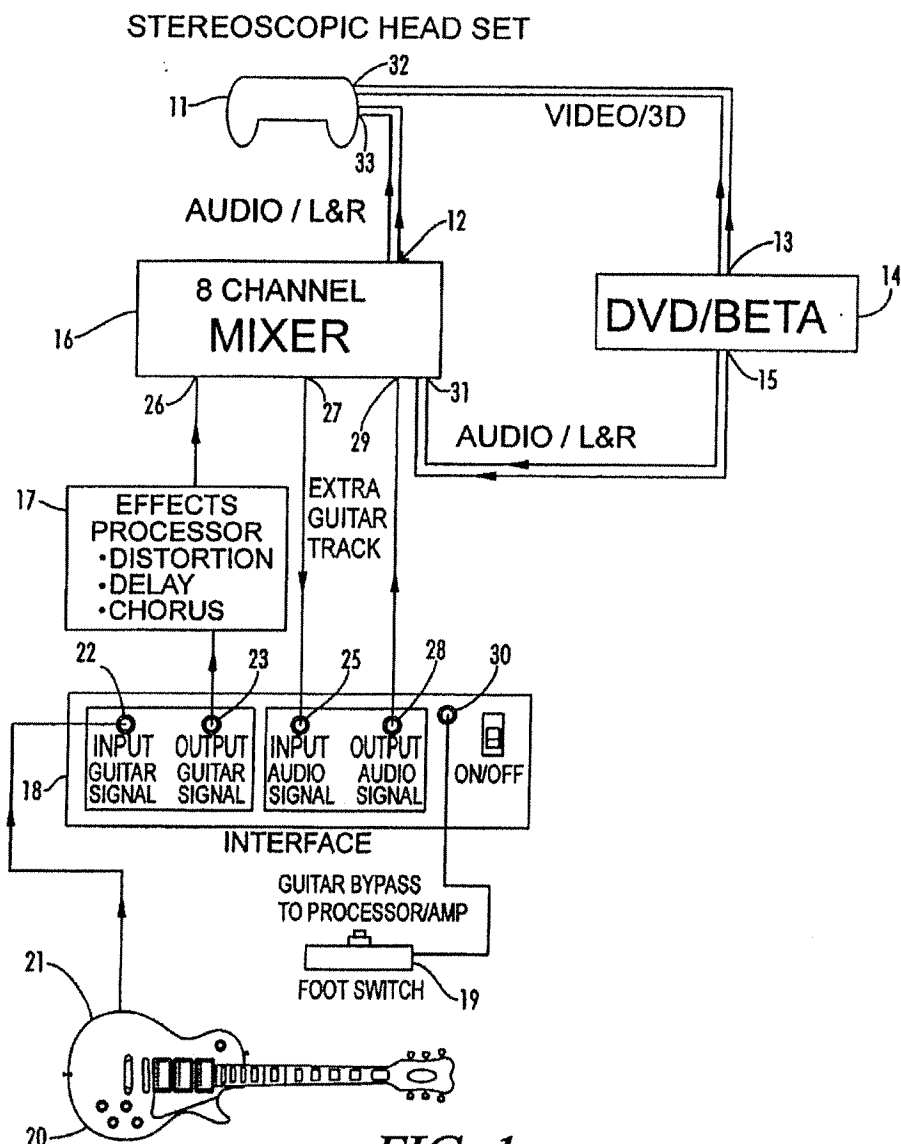


FIG. 1

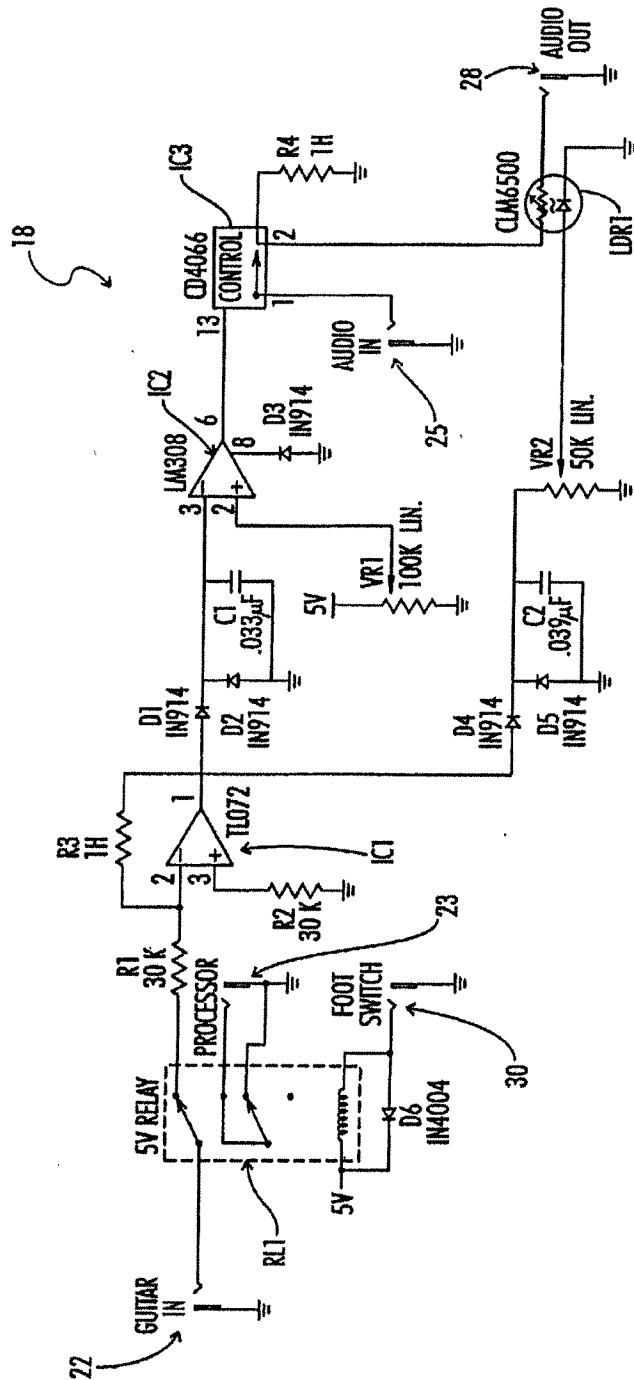


FIG. 2

# SYSTEM AND METHOD FOR GENERATING AND CONTROLLING A SIMULATED MUSICAL CONCERT EXPERIENCE

## BACKGROUND OF THE INVENTION

The present invention relates generally to audio and video simulations of a pre-recorded musical performance.

More particularly, this invention pertains to the generation and control of a simulated musical concert experience and participation by a musician in a pre-recorded musical performance using a musical instrument as the control device.

Virtual reality systems are generally recognized to be a combination of computer hardware, software, and peripherals which recreate a virtual world or virtual environment using a video display, often in combination with an audio sound system. Conventional virtual reality systems are quite complex, combining the hardware, software, and peripheral devices in a specific manner to immerse or subject the user of the system to visual and sound stimuli which simulate a real world experience. Typically, a virtual reality system further includes one or more input devices and interface software so that the user of the system can interact with the virtual environment that is being recreated, such as to simulate the user movement in the environment or manipulation of virtual objects reproduced in the virtual environment.

Virtual reality systems in the prior art have been used for entertainment purposes, to conduct scientific experiments, or to allow a user to indirectly carry out tasks which would otherwise be too difficult or dangerous when conducted in a real environment.

To a lesser extent, virtual reality systems have been used to create and control a virtual world that responds to music signals or to pre-recorded control tracks corresponding to music signals. Such a system is disclosed in U.S. Pat. No. 5,513,129, which describes a virtual reality in which a music source is connected to an electronic interface and to a virtual reality processor. The system is further controlled by one or more input devices, such as a head tracker and manipulator glove. The pre-recorded music, along with an optional pre-recorded control track, controls and manipulates objects within the virtual environment such that the music effectively drives the display of an animated graphical scene. However, the system described in U.S. Pat. No. 5,513,129 does not provide a simple and effective method for allowing a musician to participate in and control a "virtual environment" through the actual operation of a musical instrument, such as an electric guitar. Such a system would provide a source of entertainment to professional and amateur musicians alike. It also would assist musical instrument manufacturers in promoting the sale of their instruments by allowing a prospective purchaser to recreate a musical concert, to simulate the musician's participation in the concert, and to control the sound portion of the concert through operation of the guitar or other instrument. Preferably, such a simulation system would minimize the use of complex and expensive hardware and software so that the system would be easy to set up and affordable even at the retail store level. Such a system is lacking in the prior art.

## SUMMARY OF THE INVENTION

In the simulation and control system of the present invention, the video and sound portions of a musical performance or concert is pre-recorded on a video tape, digital disc, or other media containing audio and video tracks. The sound portion of the concert will include a separate instru-

ment track representing musical sounds that would be made during the pre-recorded concert by a specific musical instrument. The tape or disc containing the pre-recorded video and sound tracks is loaded into a conventional video disc or video tape player. The video output from the video player is connected to a video display, such as a stereoscopic headset. The audio output of the video player is connected to left and right audio inputs on a multi-channel audio mixer. Means are provided in the mixer or in a decoder to separate the pre-recorded instrument sound track from the left and right concert sound tracks containing music from the other concert instruments as well as ambient crowd and backstage noise. The separated instrument sound track is then available for control by other system hardware.

A musical instrument corresponding to the specific musical instrument represented by the pre-recorded instrument sound track has its audio output connected to an instrument input on a system interface box. The interface box also includes an instrument track audio input connected to an output on the mixer, with a controlled instrument track audio output from the interface box connected to a separate audio input on the mixer.

The interface box includes an instrument track control circuit which electronically varies an electrical characteristic or parameter of the instrument track audio, such as the audio level. The instrument track control circuit in the interface box is responsive to the instrument audio signals received at the instrument audio input on the interface box. Accordingly, the playing of the musical instrument by the musician will control or vary the sound level of the instrument track provided to the mixer. The mixer combines the controlled instrument soundtrack with the left and right concert sound tracks, and provides the mixed audio to a mixer output connected to the speakers on the headset. The musician can then cause the system to vary the volume level of the instrument track in response to playing of the musical instrument.

In a further embodiment of the system, the interface box includes a bypass circuit controlled by an external switch. For a normal system mode, only the controlled instrument sound track is provided to the mixer and therefore to the headset. In a bypass mode, as selected by the switch, the bypass circuit causes the interface box to suppress the instrument sound track and to provide the audio signals produced by the instrument directly to the mixer. In this bypass mode, then, the musician can hear himself play the instrument in synchronization with the concert video track and the left and right concert sound tracks, thereby enhancing the level of simulated participation. Preferably, the video portion of the pre-recorded concert is filmed as if "through the eyes" of an onstage musician so that the user of the system can assume that role while playing the instrument.

## BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a block diagram of the simulation control system of the present invention.

FIG. 2 is a schematic diagram of the system interface box used in the system of FIG. 1.

## DESCRIPTION OF THE PREFERRED EMBODIMENTS

The concert simulation and control system 10 is shown generally in FIG. 1. A musical instrument, such as a guitar 20, having one or more pick-ups or other transducers that will generate electrical audio signals, when the guitar is played, at an instrument audio output 21. Instrument audio

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output 21 is electrically connected to an instrument input 22 on a system interface box 18. Interface box 18 includes an instrument audio output 23 which, as will be described below, can be switched to provide a direct electrical connection to instrument input 22.

In one embodiment of system 10, where the musical instrument is guitar 20, a musical effects processor 17 is electrically connected between instrument audio output 23 on interface box 18 and a corresponding mixer instrument input 26 on a multi-channel audio mixer 16. Effects processor 17 is of conventional design and will typically include electronically induced distortion, delay, and other special effects which electrically modify the audio signals generated by guitar 20.

The audio mixer 16 is also of conventional design and in one embodiment, will have eight audio channels. A pair of left and right source audio inputs 31 on mixer 16 are electrically connected to corresponding left and right source audio outputs 15 on an audio video ("AV") playback device 14. AV playback device 14 is also of conventional design, and can be a video tape player or DVD player. Accordingly, AV player 14 will also have a source video output 13 electrically connected to a video input 32 on a video display device, such as the video stereoscopic headset 11. Preferably, headset 11 will be a conventional head mounted display wearable by the player of guitar 20. Headset 11 will include left and right speakers driven by a pair of left and right headset audio inputs 33 which are electrically connected to corresponding left and right mixer audio outputs 12 on mixer 16. Three-dimensional viewing of the concert video is enabled by conventional 3D shutter glasses (not shown) inside the headset. A commercially available headset usable in this application is the Model CE200-W Cyber Eye headset from General Reality Company, San Jose, Calif.

The audio portion of the pre-recorded musical concert to be played back by AV player 14 will include left and right concert sound tracks and a separable instrument sound track, all of which are electrically transmitted to mixer 16. Mixer 16 can include conventional circuits capable of electronically separating the instrument sound track from the left and right concert sound tracks. Otherwise, the tracks are separated externally by AV player 14 or by an external decoder and provided to mixer 16 through discrete inputs. Accordingly, mixer 16 will further include an instrument track mixer output 27 electrically connected to an instrument track interface input 25 on interface box 18. In accordance with the novel control system and method of this invention, and as will be described further below, interface box 18 will preferably include a controlled instrument track audio output 28 electrically connected to input 29 on mixer 16. Mixer 16 can then, in conventional fashion well known to those of skill in the art, combine and mix the left and right concert sound tracks provided at input 31 by AV player 14 with the controlled instrument sound track provided at input 29, and output the mixed audio signal to the headset 11 at mixer audio output 12.

Interface box 18 can also include a switch input 30 electrically connected to an external switch 19 operable by the musician playing guitar 20. In conjunction with the bypass and control circuits of system interface box 18 as illustrated in FIG. 2 and described below, switch 19 will place interface box 18 in either a normal or bypass mode, allowing the musician to select from at least two different simulation modes available on system 10.

One embodiment of the system interface box 18 is shown schematically in FIG. 2. The instrument input 22 is electri-

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cally connected to a relay RL1. Relay RL1 has a "normal" position in which it will cause the instrument audio output 21 to be electrically connected to the inverting input (pin 2) of operation amplifier IC1, through resistor R1. Relay RL1 can be switched to a "bypass" mode whereby the instrument audio output 21 is electrically connected directly to instrument audio output 23 on interface box 18. Relay RL1 is caused to switch from the normal mode to the bypass mode by activation of switch 19 connected to interface box 18 at switch input 30. Preferably, switch 19 is a foot operated switch so that the musician can change the system mode while simultaneously playing guitar 20 with both hands.

When the system 10 and bypass circuit 18 are in the normal mode, the instrument audio signals are amplified by IC1 in a conventional manner, with the gain set by resistors R3 and R1. The audio signals at the output of amplifier IC1 are rectified by diodes D1 and D2. The ripple in the output signal from amplifier IC1 is reduced by capacitor C1, so that the output is a substantially DC voltage having a magnitude that corresponds to variations in the average peak magnitude of the audio signals from guitar 20. The rectified signal is applied to one input of an analog comparator IC2. The output of comparator IC2 is either "high" or "low" depending upon the relationship between the voltage at terminal 3 of IC2 and the voltage at terminal 2. The voltage at terminal 2 of IC2 is a comparator threshold set in conventional manner by potentiometer VR1 connected to a nominal five volt supply voltage. The output of comparator IC2 controls an electronic switch IC3, which can be a conventional CMOS switch, such as a type CD4066 available from National Semiconductor.

Electronic switch IC3 performs the function of switching instrument track input 25 on interface box 18 into the control circuit of interface box 18 such that the instrument sound track audio is electrically connected to controlled instrument track output 28 through a control device LDR1. Control device LDR1 can be any conventional signal conditioning device, such as an amplifier or an active or passive attenuator. In the embodiment of FIG. 2, control device LDR1 is a light dependent resistor, such as the type CLM5500 available from Javenco Electronics Supply. Accordingly, the instrument sound track audio signals are attenuated by a resistive portion of control device LDR1, which is varied by the output from a light emitting portion. Thus, control device LDR1 includes a light emitting diode having a control input driven by the output of amplifier IC1. Again, the output of amplifier IC1 is rectified by diodes D4 and D5, with the rectified signal further smoothed by capacitor C2, such that the variable DC voltage is applied across potentiometer VR2. Accordingly, as the RMS or average signal level or magnitude of the instrument audio signal increases, the voltage across potentiometer VR2 will proportionally increase, thereby increasing the current through the LED portion of control device LDR1. This decreases the attenuation provided by control device LDR1 of the instrument sound track audio between instrument sound track audio input 25 and controlled instrument sound track audio output 28. Using such a control circuit, then, and when the system 10 is in the normal mode, the musician will hear the pre-recorded instrument sound track on the headset at a volume that varies in proportion to how hard or how soft the musician is striking the strings of guitar 20. This control effect provides a simulation of the musician actually participating as a player of the instrument in the pre-recorded musical concert.

In a further embodiment of system 10, an additional switch output can be provided on switch IC3 and connected



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to a control input on AV player 14, such that generation of instrument audio signals by playing of the guitar 20 will activate playback of the pre-recorded musical concert from AV player 14.

In yet another embodiment of the system 10 in which AV player 14 is a DVD player, having a conventional PCM/AC-3 digital audio output at source audio output 15, a Dolby Digital Decoder can be placed in the audio circuit between source audio output 15 and mixer source audio input 31, to digitally separate the pre-recorded instrument sound track from the pre-recorded left and right concert sound tracks.

Although system 10 is shown and described for use with an electric or amplified acoustic guitar, it can be used with a variety of other musical instruments which either directly, or indirectly through an interface device, will produce electrical audio signals representative of the sounds made by the instrument.

Also, in the embodiment of system 10 as described and shown, the characteristic of the pre-recorded instrument sound track that is controlled by the control circuit in interface box 18 is the signal level or magnitude of the audio. However, by changing the nature of the control circuit, different parameters of the instrument sound track audio can be varied in response to operation of the musical instrument. For example, a controllable analog or digital audio filter could be substituted for the light dependent resistor shown in FIG. 2, whereby the frequency response of the filter will vary in accordance with the voltage across potentiometer VR2, thereby changing the frequency or tonal characteristics of the instrument audio track as the guitar 20 is played.

In many applications, a wearable stereoscopic headset with left and right speakers is an ideal combination of a video display and audio transducer to be used with system 10. However, in other applications, a two dimensional video display can be used, either wearable or not, in conjunction with floor or wall mounted audio speakers. Or, multiple audio and video playback and display systems can be used in parallel.

Generally, the pre-recorded musical concert will be recorded on video using a stereoscopic camera to produce a "3D" playback effect, with simultaneous audio recording of the concert sound tracks and, usually, the instrument sound track. Other backstage footage can be included to simulate the musician's participation in pre-concert preparation and build-up. To further create the virtual concert experience, additional backstage and onstage audio can be recorded, either during filming of the actual musical performance or later in the studio. The separate instrument sound track can be recorded live in conjunction with the video and other audio portions of the musical concert or can be added later or re-mixed in the studio. If the system 10 is to be used by an instrument manufacturer to promote the sale of its products, suitable marketing and promotional logos and messages can be superimposed over the concert video and/or audio while the system is in operation. To this end, the pre-recorded video can include a segment where the musician is shown selecting a specific manufacturer's instrument to play on stage.

One advantage of this system is that no computer is needed to operate or control it. If a DVD player is used for AV player 14, multiple pre-recorded concert segments can be placed on the disc, allowing the user of the system to easily switch to other programs (a jazz club, a country music festival, etc.), representing a favorite experience, venue or band.

Thus, although there have been described particular embodiments of the present invention of a new System and

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Method for Generating and Controlling a Simulated Musical Concert Experience, it is not intended that such references be construed as limitations upon the scope of this invention except as set forth in the following claims.

What is claimed is:

1. A system for electronically simulating participation by a user in a pre-recorded musical performance comprising:

- a. a musical instrument, the musical instrument generating an instrument audio signal at an instrument audio output, the instrument audio signal varying in response to operation of the instrument by the user of the system;
- b. a video source providing a source video signal at a source video output, the source video signal representing a video portion of the pre-recorded musical performance;
- c. a video display responsive to the source video signal whereby the user can view the video portion of the pre-recorded musical performance on the video display;
- d. an audio source providing a source audio signal at a source audio output, the source audio signal representing an audio portion of the pre-recorded musical performance, the audio portion including an instrument sound track containing pre-recorded musical sounds that would be generated by the musical instrument in the pre-recorded musical performance;
- e. a system interface device having a first audio input electrically connected to the instrument audio output, a second audio input electrically connected to the source audio output, and a first interface audio output;
- f. the system interface device including a source audio control circuit responsive to the instrument audio signal, whereby a characteristic of the source audio signal is controlled in response to operation of the musical instrument by the user to provide a controlled source audio signal at the first interface audio output; and
- g. an audio playback transducer responsive to the controlled source audio signal such that the user can listen to the audio portion of the pre-recorded musical performance on the transducer, in synchronization with the video portion.

2. The system of claim 1 whereby the characteristic of the source audio signal controlled by the source audio control circuit is a source audio signal level.

3. The system of claim 2 wherein the musical instrument is a guitar whereby variations in striking of strings on the guitar by the user produces changes in level of the audio portion of the pre-recorded musical performance on the audio playback transducer.

4. The system of claim 1 wherein the system interface device further comprises an instrument audio switch responsive to the instrument audio signal level to connect the controlled source audio signal to the interface audio output only when the instrument audio signal level reaches a pre-determined threshold generated by operation of the musical instrument.

5. The system of claim 4 further comprising a bypass switch operable when switched to a bypass position to connect the instrument audio signal to the audio transducer such that the user can listen to the instrument audio signal while operating the musical instrument and while viewing the video portion of the musical performance.

6. The system of claim 5 wherein the system interface device is further operable to suppress the instrument audio track when the bypass switch is in the bypass position.

7. The system of claim 1 further comprising an audio mixer operably connected between the interface audio output and the audio transducer.

8. The system of claim 7 wherein the audio mixer is further operably connected between the source audio output and the first audio input on the interface device.

9. The system of claim 8 further comprising an audio effects processor operably connected between the system interface device and the audio mixer.

10. The system of claim 1 wherein the audio source and the video source are combined in a video tape machine.

11. The system of claim 1 wherein the audio source and the video source are combined in a video disc machine.

12. The system of either claim 10 or claim 11 wherein the video display and the audio playback transducer are combined in a stereoscopic head set wearable by the user.

13. A system for simulating participation of a user playing a musical instrument in a pre-recorded musical performance having audio and video portions, the musical instrument producing instrument audio signals at an instrument audio output when the instrument is played, comprising:

a. a source playback device for playback of the audio and video portions of the pre-recorded musical performance through corresponding source audio and source video outputs;

b. a source audio control device for controlling one or more characteristics of the audio portion of the pre-recorded musical performance during playback, the source audio control means operably connected to the source audio output and to the instrument audio output and having a controlled audio output; and

c. the source audio control device is responsive to the instrument audio signals whereby at least one characteristic of the audio portion of the pre-recorded musical performance is controlled by playing of the musical instrument by the user.

14. The system of claim 13 wherein the audio portion of the pre-recorded musical performance comprises a separate instrument sound track and whereby the characteristic of the audio portion controlled by the source audio control circuit is a volume level of the instrument sound track played by the system.

15. The system of claim 14 wherein the musical instrument is a guitar and wherein the instrument sound track comprises pre-recorded guitar music such that the volume level of the pre-recorded guitar music played by the system is controlled by playing of the guitar by the user.

16. The system of claim 15 further comprising a bypass switch operable by the user to suppress the instrument audio track and to cause the instrument audio signals to be played by the system when the user plays the guitar in synchronization with video portion of the pre-recorded musical performance.

17. The system of claim 16 wherein the audio portion of the pre-recorded musical performance further comprises a performance audio track separable from the instrument audio track such that the volume level of the pre-recorded guitar music is controlled independently of the performance audio track.

18. The system of claim 13 further wherein the source audio control device is further operable to cause initial activation of the source playback device in response to playing of the guitar by the user.

19. The system of claim 13 further comprising a headset wearable by the user, the headset having left and right audio speakers and a stereoscopic video display, the left and right speakers operably connected to left and right channels on the

source audio output and to the controlled audio output, and the video display operably connected to the source video output.

20. The system of claim 13 further comprising an audio mixer, the mixer operably connected between the source audio, instrument audio, and controlled audio outputs and the left and right speakers.

21. A system for allowing a player using a guitar to control simulated participation in a musical concert during synchronous playback of a pre-recorded concert video track, pre-recorded left and right concert sound tracks, and a separate pre-recorded guitar track, the system comprising:

a. an audio/video playback device adapted to play the pre-recorded video track through a video source output in synchronization with playback of the pre-recorded left and right concert sound tracks through left and right channel source outputs and the pre-recorded guitar track through a guitar track source output;

b. a video display connected to the video source output;

c. an audio interface box having an instrument input connected to an instrument output on the guitar, an instrument audio output, a guitar track input, and a controlled guitar track output;

d. an audio mixer having a mixer source input connected to the left and right channel source outputs and to the guitar track source output, a mixer instrument input connected to the instrument audio output, a guitar track output connected to the guitar track input on the interface box and adapted to output the pre-recorded guitar track, a controlled guitar track input connected to the controlled guitar track output; and a mixer audio output having right and left channels, the mixer audio output providing a system audio signal responsive to instrument audio signals at the mixer instrument input, to the guitar track, and to the left and right sound tracks;

e. left and right audio speakers connected to respective left and right channels of the mixer audio output;

f. the interface box further comprising a guitar channel control circuit operable to control a signal level of the guitar track at the controlled guitar track output in response to variation in instrument audio signals generated at the instrument audio output when the guitar is played; and

g. whereby the player can hear the left and right pre-recorded concert sound tracks and the guitar track while viewing the video track and can control a sound volume of the guitar track by playing the guitar.

22. The system of claim 21 further comprising a bypass switch connected to a switch input on the interface box, the interface box further including a bypass circuit responsive to the bypass switch and operable to inhibit output of instrument audio signals to the mixer when the bypass switch is in a normal position, and operable to inhibit output of the pre-recorded guitar track to the mixer when the bypass switch is in a bypass position, whereby the player can selectively play and hear the guitar in synchronization with the left and right concert sound tracks and with the concert video track.

23. The system of claim 21 further comprising an effects processor connected between the instrument audio output and the mixer instrument input.

24. The system of claim 21 wherein the left and right audio speakers and the video display are combined in a headset wearable by the guitar player.

25. A method of a simulating participation by a musician in a recorded concert comprising the steps of

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- a. playing on a playback device a pre-recorded concert video track in synchronization with a pre-recorded concert sound track and a pre-recorded instrument sound track;
  - b. separating the instrument sound track from the concert sound track and providing the separated instrument sound track to a control device;
  - c. varying in the control circuit at least one parameter of the instrument sound track in response to audio signals generated by a musical instrument when played by the musician, thereby generating a controlled instrument sound track; and
  - d. providing a normal simulation mode in which the controlled instrument sound track and the concert sound track are played on a sound system in synchronization with display of the concert video track.
26. The method of claim 25 further comprising the step of providing a bypass simulation mode in which the pre-recorded instrument track is suppressed and the audio signals generated by the musical instrument while the musician plays the instrument are played on the sound system in synchronization with the concert sound track and with display of the concert video.
27. The method of claim 26 wherein the musical instrument is a guitar.
28. An apparatus for controlling playback from a playback device of a pre-recorded instrument sound track in

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- synchronization with a pre-recorded concert sound track and a pre-recorded concert video track comprising:
- a. a musical instrument having an instrument audio output;
  - b. a control circuit connected to the instrument audio output and to the playback device; and
  - c. the control circuit comprising an instrument track input connected to an instrument track output through a signal conditioning circuit, the signal conditioning circuit responsive to audio signals generated by the musical instrument when the instrument is played whereby the control circuit generates a controlled instrument track signal at the instrument track output.
29. The apparatus of claim 28 further comprising a bypass circuit controlled by a bypass switch and operatively connected to the control circuit, the switch having a bypass position in which the bypass circuit inhibits generation of the controlled instrument track signal and allows audio reproduction of the audio signals generated by the musical instrument during playback of video track and the concert sound track.
30. The apparatus of claim 29 wherein the musical instrument is a guitar and wherein the pre-recorded instrument track comprises guitar music.

\* \* \* \* \*



Given  
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12 UNITED STATES DISTRICT COURT  
13 CENTRAL DISTRICT OF CALIFORNIA  
14 WESTERN DIVISION

15 ACTIVISION PUBLISHING INC., a  
16 Delaware corporation,  
17 Plaintiff,  
18 vs.  
19 GIBSON GUITAR CORPORATION, a  
20 Delaware corporation,  
21 Defendant.

CASE NO. CV08-01653 PSG  
COMPLAINT FOR DECLARATORY  
RELIEF  
DEMAND FOR JURY TRIAL  
(SHX)

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1                   **THE SUBSTANTIAL CONTROVERSY BETWEEN THE PARTIES**

2                   8.       Activision is a leading international publisher of interactive  
3 entertainment software. Activision distributes certain video games and controllers  
4 marketed under the trademark "Guitar Hero" (the "Guitar Hero game").

5                   9.       On information and belief Gibson purports to be the owner of all  
6 right, title and interest in and to United States Letters Patent No. 5,990,405 ("the  
7 '405 Patent"), titled "System and Method for Generating and Controlling a  
8 Simulated Musical Concert Experience." A copy of the '405 Patent is attached at  
9 Exhibit A.

10                  10.       On January 7, 2008, counsel for Gibson notified Activision by  
11 letter that Activision's Guitar Hero game was allegedly covered by the claims of the  
12 '405 patent (a copy of this letter is attached at Exhibit B):

13                       based on our preliminary analysis, the Guitar Hero  
14 software (including any expansion packs) and the guitar  
15 controller provided by Activision being used as a musical  
16 instrument (packaged with the software or sold  
17 standalone) are covered by the '405 patent. By continuing  
18 to sell any version of the Guitar Hero game software  
19 and/or instrument controllers for use with the Guitar Hero  
20 game software (packaged or sold standalone), Activision  
21 is taking advantage of Gibson's patented technology  
22 without properly compensating Gibson.

23                  11.       Gibson further demanded that Activision either halt all sales of  
24 any version of the Guitar Hero game or enter into a license under the '405 patent:

25                       In summary, Gibson requests that Activision ***obtain a***  
26 ***license under Gibson's '405 patent or halt sales of any***  
27 ***version of the Guitar Hero game software*** (including  
28 expansion packs) and/or instrument controllers for use  
with the Guitar Hero game software (packaged or sold  
standalone). Gibson takes this threat to its intellectual  
property seriously and is prepared to discuss any  
reasonable resolution to the matter. (emphasis added)

12                  12.       Activision responded to this letter on January 17, 2008,  
13 requesting additional information from Gibson to assess Gibson's demands.

14                  13.       Gibson responded by letter on February 18, 2008 (a copy of this  
15 letter is attached at Exhibit C). In this letter, Gibson attached a "Preliminary Claim

1 Chart Relating to Gibson's USPN 5,990,405 and Activision's Guitar Hero System,"  
2 which allegedly compared the elements of claims 1, 13, 14, 15, 25, and 28 of the  
3 '405 patent to the Guitar Hero game.

4 14. Gibson again reiterated its demand that Activision enter into a  
5 license or halt all sales of the Guitar Hero game. Gibson demanded a response  
6 within a week of its February 18 letter:

7 Again, Gibson requests that Activision obtain a license  
8 under Gibson's '405 patent or halt sales of any version of  
9 the Guitar Hero Product, including game software (and  
10 expansion packs) and/or instrument controllers for use  
11 with the guitar Hero game software (packaged or sold  
12 standalone). Gibson has not previously licensed the '405  
13 patent, but takes this threat to its intellectual property  
14 seriously and remains prepared to discuss any reasonable  
15 resolution to the matter.

16 Please respond by **February 22, 2008**

17 15. Prior to the February 22 deadline, Activision requested  
18 additional time to consider Gibson's allegations.

19 16. Activision thereafter decided that it did not want or need a  
20 license under Gibson's '405 patent. Activision informed Gibson in a letter dated  
21 March 10 that it did not infringe any valid claim of the '405 patent. Activision  
22 therefore declined to enter into a license under the '405 patent (a copy of this letter is  
23 attached at Exhibit D).

24 17. By virtue of the foregoing, there is a substantial controversy  
25 between Activision and Gibson. Furthermore, Activision and Gibson have adverse  
26 legal interests of sufficient immediacy and reality to warrant the issuance of a  
27 declaratory judgment.  
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1           23. Each claim of the '405 patent is invalid for failure to meet one or  
2 more of the conditions of patentability specified in 35 U.S.C. §§ 102, 103, and/or  
3 112.

4  
5                           **THIRD CLAIM FOR RELIEF**  
6                   **(Declaratory Judgment Of Equitable Estoppel)**  
7

8           24. Plaintiff repeats and realleges each and every allegation in  
9 Paragraphs 1 through 17 of this Complaint with the same force and effect as if fully  
10 set forth herein.

11           25. By virtue of Gibson's allegations that Activision's Guitar Hero  
12 game is covered by the '405 patent, and by virtue of Gibson's demands that  
13 Activision either take a license under the '405 patent or "halt sales of any version of  
14 the Guitar Hero Product," a substantial controversy exists between Activision and  
15 Gibson as to whether Activision and/or its Guitar Hero game infringes the '405  
16 patent.

17           26. On information and belief, Gibson has been aware of the Guitar  
18 Hero Game for many years.

19           27. On information and belief, despite being aware of the Guitar  
20 Hero Game for many years, Gibson has encouraged Activision to manufacture and  
21 sell devices it now alleges infringe the '405 patent.

22           28. Based on Gibson's actions, along with other aspects of the  
23 parties' business relationship, Gibson is barred under the doctrine of equitable  
24 estoppel from asserting that Activision infringes the '405 patent.

1 **FOURTH CLAIM FOR RELIEF**

2 **(Declaratory Judgment That Activision Has An Implied License Under The**  
3 **'405 Patent)**

4  
5 29. Plaintiff repeats and realleges each and every allegation in  
6 Paragraphs 1 through 17 of this Complaint with the same force and effect as if fully  
7 set forth herein.

8 30. By virtue of Gibson's allegations that Activision's Guitar Hero  
9 game is covered by the '405 patent, and by virtue of Gibson's demands that  
10 Activision either take a license under the '405 patent or "halt sales of any version of  
11 the Guitar Hero Product," a substantial controversy exists between Activision and  
12 Gibson as to whether Activision and/or its Guitar Hero game infringes the '405  
13 patent.

14 31. On information and belief, Gibson has been aware of the Guitar  
15 Hero Game for many years.

16 32. On information and belief, despite being aware of the Guitar  
17 Hero Game for many years, Gibson has encouraged Activision to manufacture and  
18 sell devices it now alleges infringe the '405 patent.

19 33. Based on Gibson's actions, along with other aspects of the  
20 parties' business relationship, Activision has an implied license under the '405 patent  
21 and Gibson cannot therefore claim that Activision infringes the '405 patent.

22  
23 **FIFTH CLAIM FOR RELIEF**

24 **(Declaratory Judgment of Laches)**

25  
26 34. Plaintiff repeats and realleges each and every allegation in  
27 Paragraphs 1 through 17 of this Complaint with the same force and effect as if fully  
28 set forth herein.

1           35. By virtue of Gibson's allegations that Activision's Guitar Hero  
2 game is covered by the '405 patent, and by virtue of Gibson's demands that  
3 Activision either take a license under the '405 patent or "halt sales of any version of  
4 the Guitar Hero Product," a substantial controversy exists between Activision and  
5 Gibson as to whether Activision and/or its Guitar Hero game infringes the '405  
6 patent.

7           36. On information and belief, Gibson has been aware of the Guitar  
8 Hero Game for many years.

9           37. On information and belief, Gibson has delayed in bringing a  
10 patent infringement lawsuit against Activision.

11           38. On information and belief, this delay is unreasonable and  
12 unexcused.

13           39. Gibson's delay has materially prejudiced Activision.

14           40. Any damages that Gibson claims are barred in whole or in part  
15 by the doctrine of laches.

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18                           **PRAYER FOR RELIEF**

19           WHEREFORE, Activision requests entry of judgment in its favor and  
20 against Gibson as follows:

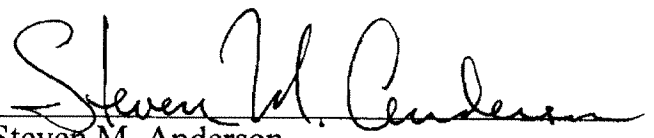
- 21           A. Declaring that Activision and its products sold under the "Guitar  
22 Hero" name, including all versions, peripherals, controllers, and  
23 expansion packs, do not infringe, literally or under the doctrine  
24 of equivalents, either directly, indirectly or willfully, any claim  
25 of the '405 patent;
- 26           B. Declaring that Gibson is barred under the doctrine of equitable  
27 estoppel from asserting that Activision and its products sold  
28 under the "Guitar Hero" name, including all versions,

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- peripherals, controllers, and expansion packs infringe the '405 patent;
- C. Declaring that Activision has an implied license under the '405 patent;
- D. Declaring that any damages Gibson claims are barred in whole or in part by the doctrine of laches;
- E. Declaring that all claims of the '405 patent are invalid;
- F. Declaring this case an "exceptional case" within the meaning of 35 U.S.C. § 285 and awarding reasonable attorneys' fees to Activision; and
- G. Awarding Activision other costs and further relief as the Court deems just and proper.

DATED: March 11, 2008

QUINN EMANUEL URQUHART OLIVER &  
HEDGES, LLP

By   
Steven M. Anderson  
Attorneys for Plaintiff

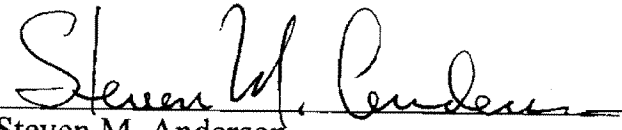
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**DEMAND FOR JURY TRIAL**

Plaintiff hereby demands a jury trial pursuant to Rule 38(b) of the Federal Rules of Civil Procedure.

DATED: March 11, 2008

QUINN EMANUEL URQUHART OLIVER &  
HEDGES, LLP

By   
Steven M. Anderson  
Attorneys for Plaintiff



# United States Patent [19]

Auten et al.

US005990405A

[11] Patent Number: 5,990,405  
[45] Date of Patent: Nov. 23, 1999

[54] SYSTEM AND METHOD FOR GENERATING AND CONTROLLING A SIMULATED MUSICAL CONCERT EXPERIENCE

[75] Inventors: Don R. Auten, Nashville; Richard T. Akers, Antioch; Richard Gembar, Mt. Juliet, all of Tenn.

[73] Assignee: Gibson Guitar Corp., Nashville, Tenn.

[21] Appl. No.: 09/112,050

[22] Filed: Jul. 8, 1998

[51] Int. Cl.<sup>6</sup> ..... G10H 1/36

[52] U.S. Cl. .... 84/609; 84/610; 84/634; 84/649; 84/650

[58] Field of Search ..... 84/600-602, 609-612, 84/622-625, 626, 633-636, 649-652, 712-714, 477 R, 478

## [56] References Cited

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Primary Examiner—William M. Shoop, Jr.

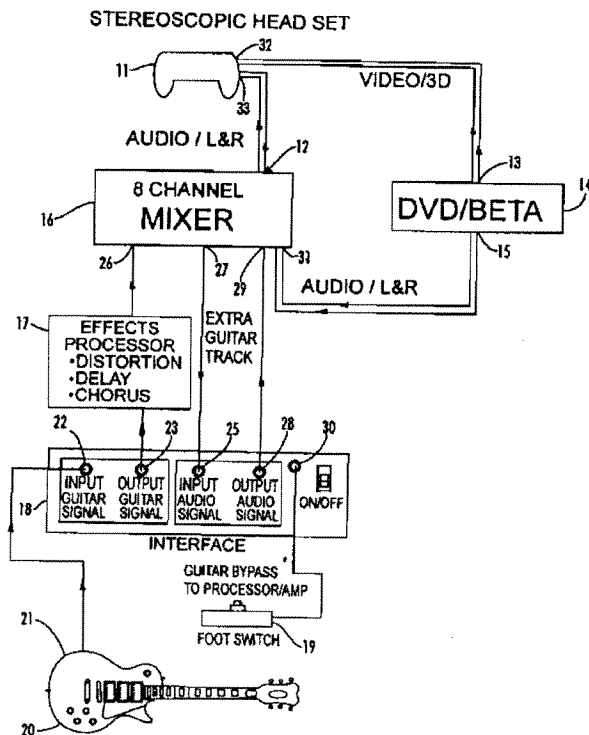
Assistant Examiner—Marlon Fletcher

Attorney, Agent, or Firm—Waddey & Patterson

## [57] ABSTRACT

A musician can simulate participation in a concert by playing a musical instrument and wearing a head-mounted 3D display that includes stereo speakers. Audio and video portions of a musical concert are pre-recorded, along with a separate sound track corresponding to the musical instrument played by the musician. Playback of the instrument sound track is controlled by signals generated in the musical instrument and transmitted to a system interface box connected to the audio-video play back device, an audio mixer, and the head-mounted display. An external bypass switch allows the musician to suppress the instrument sound track so that the sounds created by actual playing of the musical instrument are heard along with the pre-recorded audio and video portions.

30 Claims, 2 Drawing Sheets





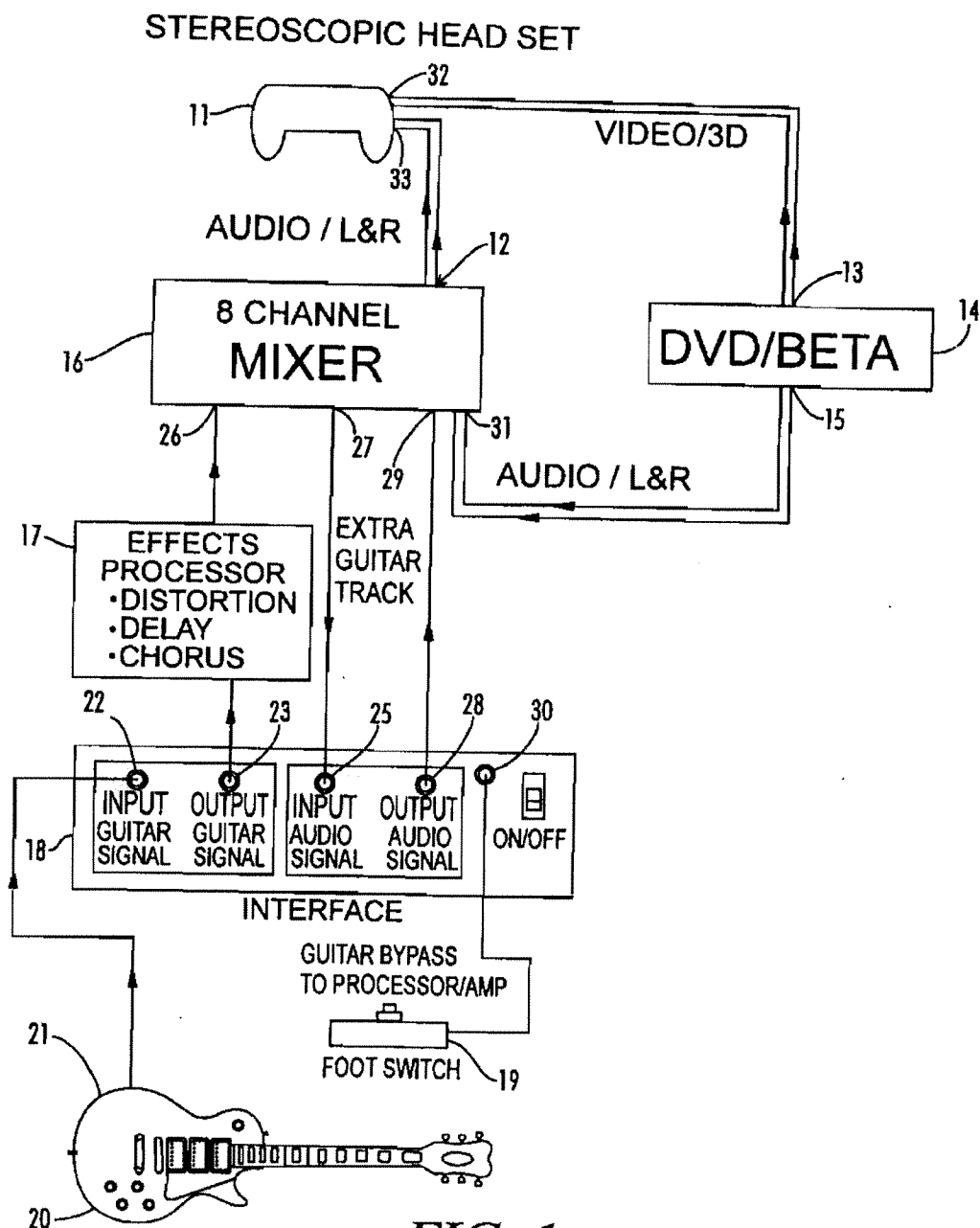


FIG. 1

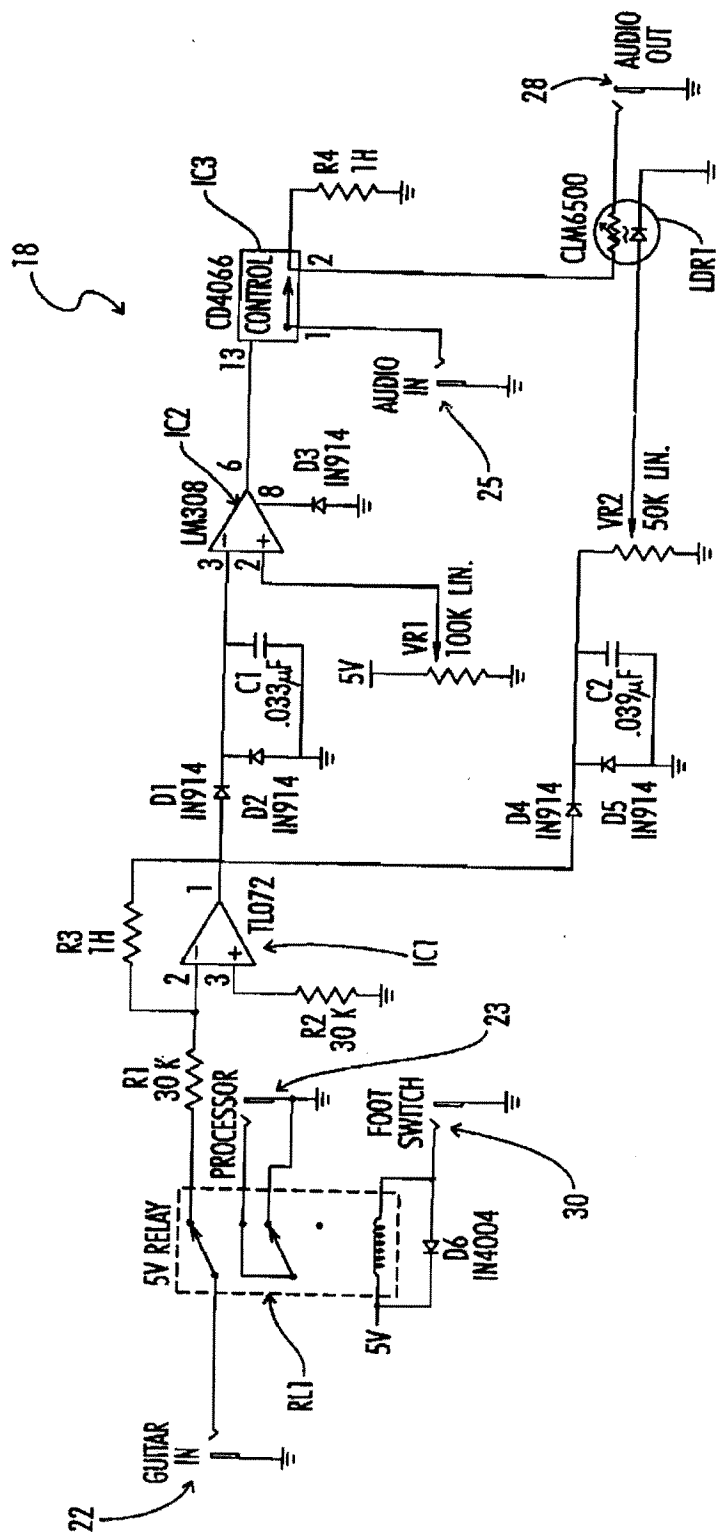


FIG. 2

# SYSTEM AND METHOD FOR GENERATING AND CONTROLLING A SIMULATED MUSICAL CONCERT EXPERIENCE

## BACKGROUND OF THE INVENTION

The present invention relates generally to audio and video simulations of a pre-recorded musical performance.

More particularly, this invention pertains to the generation and control of a simulated musical concert experience and participation by a musician in a pre-recorded musical performance using a musical instrument as the control device.

Virtual reality systems are generally recognized to be a combination of computer hardware, software, and peripherals which recreate a virtual world or virtual environment using a video display, often in combination with an audio sound system. Conventional virtual reality systems are quite complex, combining the hardware, software, and peripheral devices in a specific manner to immerse or subject the user of the system to visual and sound stimuli which simulate a real world experience. Typically, a virtual reality system further includes one or more input devices and interface software so that the user of the system can interact with the virtual environment that is being recreated, such as to simulate the user movement in the environment or manipulation of virtual objects reproduced in the virtual environment.

Virtual reality systems in the prior art have been used for entertainment purposes, to conduct scientific experiments, or to allow a user to indirectly carry out tasks which would otherwise be too difficult or dangerous when conducted in a real environment.

To a lesser extent, virtual reality systems have been used to create and control a virtual world that responds to music signals or to pre-recorded control tracks corresponding to music signals. Such a system is disclosed in U.S. Pat. No. 5,513,129, which describes a virtual reality in which a music source is connected to an electronic interface and to a virtual reality processor. The system is further controlled by one or more input devices, such as a head tracker and manipulator glove. The pre-recorded music, along with an optional pre-recorded control track, controls and manipulates objects within the virtual environment such that the music effectively drives the display of an animated graphical scene. However, the system described in U.S. Pat. No. 5,513,129 does not provide a simple and effective method for allowing a musician to participate in and control a "virtual environment" through the actual operation of a musical instrument, such as an electric guitar. Such a system would provide a source of entertainment to professional and amateur musicians alike. It also would assist musical instrument manufacturers in promoting the sale of their instruments by allowing a prospective purchaser to recreate a musical concert, to simulate the musician's participation in the concert, and to control the sound portion of the concert through operation of the guitar or other instrument. Preferably, such a simulation system would minimize the use of complex and expensive hardware and software so that the system would be easy to set up and affordable even at the retail store level. Such a system is lacking in the prior art.

## SUMMARY OF THE INVENTION

In the simulation and control system of the present invention, the video and sound portions of a musical performance or concert is pre-recorded on a video tape, digital disc, or other media containing audio and video tracks. The sound portion of the concert will include a separate instru-

ment track representing musical sounds that would be made during the pre-recorded concert by a specific musical instrument. The tape or disc containing the pre-recorded video and sound tracks is loaded into a conventional video disc or video tape player. The video output from the video player is connected to a video display, such as a stereoscopic headset. The audio output of the video player is connected to left and right audio inputs on a multi-channel audio mixer. Means are provided in the mixer or in a decoder to separate the pre-recorded instrument sound track from the left and right concert sound tracks containing music from the other concert instruments as well as ambient crowd and backstage noise. The separated instrument sound track is then available for control by other system hardware.

A musical instrument corresponding to the specific musical instrument represented by the pre-recorded instrument sound track has its audio output connected to an instrument input on a system interface box. The interface box also includes an instrument track audio input connected to an output on the mixer, with a controlled instrument track audio output from the interface box connected to a separate audio input on the mixer.

The interface box includes an instrument track control circuit which electronically varies an electrical characteristic or parameter of the instrument track audio, such as the audio level. The instrument track control circuit in the interface box is responsive to the instrument audio signals received at the instrument audio input on the interface box. Accordingly, the playing of the musical instrument by the musician will control or vary the sound level of the instrument track provided to the mixer. The mixer combines the controlled instrument soundtrack with the left and right concert sound tracks, and provides the mixed audio to a mixer output connected to the speakers on the headset. The musician can then cause the system to vary the volume level of the instrument track in response to playing of the musical instrument.

In a further embodiment of the system, the interface box includes a bypass circuit controlled by an external switch. For a normal system mode, only the controlled instrument sound track is provided to the mixer and therefore to the headset. In a bypass mode, as selected by the switch, the bypass circuit causes the interface box to suppress the instrument sound track and to provide the audio signals produced by the instrument directly to the mixer. In this bypass mode, then, the musician can hear himself play the instrument in synchronization with the concert video track and the left and right concert sound tracks, thereby enhancing the level of simulated participation. Preferably, the video portion of the pre-recorded concert is filmed as if "through the eyes" of an onstage musician so that the user of the system can assume that role while playing the instrument.

## BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a block diagram of the simulation control system of the present invention.

FIG. 2 is a schematic diagram of the system interface box used in the system of FIG. 1.

## DESCRIPTION OF THE PREFERRED EMBODIMENTS

The concert simulation and control system 10 is shown generally in FIG. 1. A musical instrument, such as a guitar 20, having one or more pick-ups or other transducers that will generate electrical audio signals, when the guitar is played, at an instrument audio output 21. Instrument audio

output 21 is electrically connected to an instrument input 22 on a system interface box 18. Interface box 18 includes an instrument audio output 23 which, as will be described below, can be switched to provide a direct electrical connection to instrument input 22.

In one embodiment of system 10, where the musical instrument is guitar 20, a musical effects processor 17 is electrically connected between instrument audio output 23 on interface box 18 and a corresponding mixer instrument input 26 on a multi-channel audio mixer 16. Effects processor 17 is of conventional design and will typically include electronically induced distortion, delay, and other special effects which electrically modify the audio signals generated by guitar 20.

The audio mixer 16 is also of conventional design and in one embodiment, will have eight audio channels. A pair of left and right source audio inputs 31 on mixer 16 are electrically connected to corresponding left and right source audio outputs 15 on an audio video ("AV") playback device 14. AV playback device 14 is also of conventional design, and can be a video tape player or DVD player. Accordingly, AV player 14 will also have a source video output 13 electrically connected to a video input 32 on a video display device, such as the video stereoscopic headset 11. Preferably, headset 11 will be a conventional head mounted display wearable by the player of guitar 20. Headset 11 will include left and right speakers driven by a pair of left and right headset audio inputs 33 which are electrically connected to corresponding left and right mixer audio outputs 12 on mixer 16. Three-dimensional viewing of the concert video is enabled by conventional 3D shutter glasses (not shown) inside the headset. A commercially available headset usable in this application is the Model CE200-W Cyber Eye headset from General Reality Company, San Jose, Calif.

The audio portion of the pre-recorded musical concert to be played back by AV player 14 will include left and right concert sound tracks and a separable instrument sound track, all of which are electrically transmitted to mixer 16. Mixer 16 can include conventional circuits capable of electronically separating the instrument sound track from the left and right concert sound tracks. Otherwise, the tracks are separated externally by AV player 14 or by an external decoder and provided to mixer 16 through discrete inputs. Accordingly, mixer 16 will further include an instrument track mixer output 27 electrically connected to an instrument track interface input 25 on interface box 18. In accordance with the novel control system and method of this invention, and as will be described further below, interface box 18 will preferably include a controlled instrument track audio output 28 electrically connected to input 29 on mixer 16. Mixer 16 can then, in conventional fashion well known to those of skill in the art, combine and mix the left and right concert sound tracks provided at input 31 by AV player 14 with the controlled instrument sound track provided at input 29, and output the mixed audio signal to the headset 11 at mixer audio output 12.

Interface box 18 can also include a switch input 30 electrically connected to an external switch 19 operable by the musician playing guitar 20. In conjunction with the bypass and control circuits of system interface box 18 as illustrated in FIG. 2 and described below, switch 19 will place interface box 18 in either a normal or bypass mode, allowing the musician to select from at least two different simulation modes available on system 10.

One embodiment of the system interface box 18 is shown schematically in FIG. 2. The instrument input 22 is electri-

cally connected to a relay RL1. Relay RL1 has a "normal" position in which it will cause the instrument audio output 21 to be electrically connected to the inverting input (pin 2) of operation amplifier IC1, through resistor R1. Relay RL1 can be switched to a "bypass" mode whereby the instrument audio output 21 is electrically connected directly to instrument audio output 23 on interface box 18. Relay RL1 is caused to switch from the normal mode to the bypass mode by activation of switch 19 connected to interface box 18 at switch input 30. Preferably, switch 19 is a foot operated switch so that the musician can change the system mode while simultaneously playing guitar 20 with both hands.

When the system 10 and bypass circuit 18 are in the normal mode, the instrument audio signals are amplified by IC1 in a conventional manner, with the gain set by resistors R3 and R1. The audio signals at the output of amplifier IC1 are rectified by diodes D1 and D2. The ripple in the output signal from amplifier IC1 is reduced by capacitor C1, so that the output is a substantially DC voltage having a magnitude that corresponds to variations in the average peak magnitude of the audio signals from guitar 20. The rectified signal is applied to one input of an analog comparator IC2. The output of comparator IC2 is either "high" or "low" depending upon the relationship between the voltage at terminal 3 of IC2 and the voltage at terminal 2. The voltage at terminal 2 of IC2 is a comparator threshold set in conventional manner by potentiometer VR1 connected to a nominal five volt supply voltage. The output of comparator IC2 controls an electronic switch IC3, which can be a conventional CMOS switch, such as a type CD4066 available from National Semiconductor.

Electronic switch IC3 performs the function of switching instrument track input 25 on interface box 18 into the control circuit of interface box 18 such that the instrument sound track audio is electrically connected to controlled instrument track output 28 through a control device LDR1. Control device LDR1 can be any conventional signal conditioning device, such as an amplifier or an active or passive attenuator. In the embodiment of FIG. 2, control device LDR1 is a light dependent resistor, such as the type CLM5500 available from Javenco Electronics Supply. Accordingly, the instrument sound track audio signals are attenuated by a resistive portion of control device LDR1, which is varied by the output from a light emitting portion. Thus, control device LDR1 includes a light emitting diode having a control input driven by the output of amplifier IC1. Again, the output of amplifier IC1 is rectified by diodes D4 and D5, with the rectified signal further smoothed by capacitor C2, such that the variable DC voltage is applied across potentiometer VR2. Accordingly, as the RMS or average signal level or magnitude of the instrument audio signal increases, the voltage across potentiometer VR2 will proportionally increase, thereby increasing the current through the LED portion of control device LDR1. This decreases the attenuation provided by control device LDR1 of the instrument sound track audio between instrument sound track audio input 25 and controlled instrument sound track audio output 28. Using such a control circuit, then, and when the system 10 is in the normal mode, the musician will hear the pre-recorded instrument sound track on the headset at a volume that varies in proportion to how hard or how soft the musician is striking the strings of guitar 20. This control effect provides a simulation of the musician actually participating as a player of the instrument in the pre-recorded musical concert.

In a further embodiment of system 10, an additional switch output can be provided on switch IC3 and connected

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to a control input on AV player 14, such that generation of instrument audio signals by playing of the guitar 20 will activate playback of the pre-recorded musical concert from AV player 14.

In yet another embodiment of the system 10 in which AV player 14 is a DVD player, having a conventional PCM/AC-3 digital audio output at source audio output 15, a Dolby Digital Decoder can be placed in the audio circuit between source audio output 15 and mixer source audio input 31, to digitally separate the pre-recorded instrument sound track from the pre-recorded left and right concert sound tracks.

Although system 10 is shown and described for use with an electric or amplified acoustic guitar, it can be used with a variety of other musical instruments which either directly, or indirectly through an interface device, will produce electrical audio signals representative of the sounds made by the instrument.

Also, in the embodiment of system 10 as described and shown, the characteristic of the pre-recorded instrument sound track that is controlled by the control circuit in interface box 18 is the signal level or magnitude of the audio. However, by changing the nature of the control circuit, different parameters of the instrument sound track audio can be varied in response to operation of the musical instrument. For example, a controllable analog or digital audio filter could be substituted for the light dependent resistor shown in FIG. 2, whereby the frequency response of the filter will vary in accordance with the voltage across potentiometer VR2, thereby changing the frequency or tonal characteristics of the instrument audio track as the guitar 20 is played.

In many applications, a wearable stereoscopic headset with left and right speakers is an ideal combination of a video display and audio transducer to be used with system 10. However, in other applications, a two dimensional video display can be used, either wearable or not, in conjunction with floor or wall mounted audio speakers. Or, multiple audio and video playback and display systems can be used in parallel.

Generally, the pre-recorded musical concert will be recorded on video using a stereoscopic camera to produce a "3D" playback effect, with simultaneous audio recording of the concert sound tracks and, usually, the instrument sound track. Other backstage footage can be included to simulate the musician's participation in pre-concert preparation and build-up. To further create the virtual concert experience, additional backstage and onstage audio can be recorded, either during filming of the actual musical performance or later in the studio. The separate instrument sound track can be recorded live in conjunction with the video and other audio portions of the musical concert or can be added later or re-mixed in the studio. If the system 10 is to be used by an instrument manufacturer to promote the sale of its products, suitable marketing and promotional logos and messages can be superimposed over the concert video and/or audio while the system is in operation. To this end, the pre-recorded video can include a segment where the musician is shown selecting a specific manufacturer's instrument to play on stage.

One advantage of this system is that no computer is needed to operate or control it. If a DVD player is used for AV player 14, multiple pre-recorded concert segments can be placed on the disc, allowing the user of the system to easily switch to other programs (a jazz club, a country music festival, etc.), representing a favorite experience, venue or band.

Thus, although there have been described particular embodiments of the present invention of a new System and

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Method for Generating and Controlling a Simulated Musical Concert Experience, it is not intended that such references be construed as limitations upon the scope of this invention except as set forth in the following claims.

What is claimed is:

1. A system for electronically simulating participation by a user in a pre-recorded musical performance comprising:

a. a musical instrument, the musical instrument generating an instrument audio signal at an instrument audio output, the instrument audio signal varying in response to operation of the instrument by the user of the system;

b. a video source providing a source video signal at a source video output, the source video signal representing a video portion of the pre-recorded musical performance;

c. a video display responsive to the source video signal whereby the user can view the video portion of the pre-recorded musical performance on the video display;

d. an audio source providing a source audio signal at a source audio output, the source audio signal representing an audio portion of the pre-recorded musical performance, the audio portion including an instrument sound track containing pre-recorded musical sounds that would be generated by the musical instrument in the pre-recorded musical performance;

e. a system interface device having a first audio input electrically connected to the instrument audio output, a second audio input electrically connected to the source audio output, and a first interface audio output;

f. the system interface device including a source audio control circuit responsive to the instrument audio signal, whereby a characteristic of the source audio signal is controlled in response to operation of the musical instrument by the user to provide a controlled source audio signal at the first interface audio output; and

g. an audio playback transducer responsive to the controlled source audio signal such that the user can listen to the audio portion of the pre-recorded musical performance on the transducer, in synchronization with the video portion.

2. The system of claim 1 whereby the characteristic of the source audio signal controlled by the source audio control circuit is a source audio signal level.

3. The system of claim 2 wherein the musical instrument is a guitar whereby variations in striking of strings on the guitar by the user produces changes in level of the audio portion of the pre-recorded musical performance on the audio playback transducer.

4. The system of claim 1 wherein the system interface device further comprises an instrument audio switch responsive to the instrument audio signal level to connect the controlled source audio signal to the interface audio output only when the instrument audio signal level reaches a pre-determined threshold generated by operation of the musical instrument.

5. The system of claim 4 further comprising a bypass switch operable when switched to a bypass position to connect the instrument audio signal to the audio transducer such that the user can listen to the instrument audio signal while operating the musical instrument and while viewing the video portion of the musical performance.

6. The system of claim 5 wherein the system interface device is further operable to suppress the instrument audio track when the bypass switch is in the bypass position.

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7. The system of claim 1 further comprising an audio mixer operably connected between the interface audio output and the audio transducer.

8. The system of claim 7 wherein the audio mixer is further operably connected between the source audio output and the first audio input on the interface device.

9. The system of claim 8 further comprising an audio effects processor operably connected between the system interface device and the audio mixer.

10. The system of claim 1 wherein the audio source and the video source are combined in a video tape machine.

11. The system of claim 1 wherein the audio source and the video source are combined in a video disc machine.

12. The system of either claim 10 or claim 11 wherein the video display and the audio playback transducer are combined in a stereoscopic head set wearable by the user.

13. A system for simulating participation of a user playing a musical instrument in a pre-recorded musical performance having audio and video portions, the musical instrument producing instrument audio signals at an instrument audio output when the instrument is played, comprising:

a. a source playback device for playback of the audio and video portions of the pre-recorded musical performance through corresponding source audio and source video outputs;

b. a source audio control device for controlling one or more characteristics of the audio portion of the pre-recorded musical performance during playback, the source audio control means operably connected to the source audio output and to the instrument audio output and having a controlled audio output; and

c. the source audio control device is responsive to the instrument audio signals whereby at least one characteristic of the audio portion of the pre-recorded musical performance is controlled by playing of the musical instrument by the user.

14. The system of claim 13 wherein the audio portion of the pre-recorded musical performance comprises a separate instrument sound track and whereby the characteristic of the audio portion controlled by the source audio control circuit is a volume level of the instrument sound track played by the system.

15. The system of claim 14 wherein the musical instrument is a guitar and wherein the instrument sound track comprises pre-recorded guitar music such that the volume level of the pre-recorded guitar music played by the system is controlled by playing of the guitar by the user.

16. The system of claim 15 further comprising a bypass switch operable by the user to suppress the instrument audio track and to cause the instrument audio signals to be played by the system when the user plays the guitar in synchronization with video portion of the pre-recorded musical performance.

17. The system of claim 16 wherein the audio portion of the pre-recorded musical performance further comprises a performance audio track separable from the instrument audio track such that the volume level of the pre-recorded guitar music is controlled independently of the performance audio track.

18. The system of claim 13 further wherein the source audio control device is further operable to cause initial activation of the source playback device in response to playing of the guitar by the user.

19. The system of claim 13 further comprising a headset wearable by the user, the headset having left and right audio speakers and a stereoscopic video display, the left and right speakers operably connected to left and right channels on the

source audio output and to the controlled audio output, and the video display operably connected to the source video output.

20. The system of claim 13 further comprising an audio mixer, the mixer operably connected between the source audio, instrument audio, and controlled audio outputs and the left and right speakers.

21. A system for allowing a player using a guitar to control simulated participation in a musical concert during synchronous playback of a pre-recorded concert video track, pre-recorded left and right concert sound tracks, and a separate pre-recorded guitar track, the system comprising:

a. an audio/video playback device adapted to play the pre-recorded video track through a video source output in synchronization with playback of the pre-recorded left and right concert sound tracks through left and right channel source outputs and the pre-recorded guitar track through a guitar track source output;

b. a video display connected to the video source output;

c. an audio interface box having an instrument input connected to an instrument output on the guitar, an instrument audio output, a guitar track input, and a controlled guitar track output;

d. an audio mixer having a mixer source input connected to the left and right channel source outputs and to the guitar track source output, a mixer instrument input connected to the instrument audio output, a guitar track output connected to the guitar track input on the interface box and adapted to output the pre-recorded guitar track, a controlled guitar track input connected to the controlled guitar track output; and a mixer audio output having right and left channels, the mixer audio output providing a system audio signal responsive to instrument audio signals at the mixer instrument input, to the guitar track, and to the left and right sound tracks;

e. left and right audio speakers connected to respective left and right channels of the mixer audio output;

f. the interface box further comprising a guitar channel control circuit operable to control a signal level of the guitar track at the controlled guitar track output in response to variation in instrument audio signals generated at the instrument audio output when the guitar is played; and

g. whereby the player can hear the left and right pre-recorded concert sound tracks and the guitar track while viewing the video track and can control a sound volume of the guitar track by playing the guitar.

22. The system of claim 21 further comprising a bypass switch connected to a switch input on the interface box, the interface box further including a bypass circuit responsive to the bypass switch and operable to inhibit output of instrument audio signals to the mixer when the bypass switch is in a normal position, and operable to inhibit output of the pre-recorded guitar track to the mixer when the bypass switch is in a bypass position, whereby the player can selectively play and hear the guitar in synchronization with the left and right concert sound tracks and with the concert video track.

23. The system of claim 21 further comprising an effects processor connected between the instrument audio output and the mixer instrument input.

24. The system of claim 21 wherein the left and right audio speakers and the video display are combined in a headset wearable by the guitar player.

25. A method of a simulating participation by a musician in a recorded concert comprising the steps of

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- a. playing on a playback device a pre-recorded concert video track in synchronization with a pre-recorded concert sound track and a pre-recorded instrument sound track;
  - b. separating the instrument sound track from the concert sound track and providing the separated instrument sound track to a control device;
  - c. varying in the control circuit at least one parameter of the instrument sound track in response to audio signals generated by a musical instrument when played by the musician, thereby generating a controlled instrument sound track; and
  - d. providing a normal simulation mode in which the controlled instrument sound track and the concert sound track are played on a sound system in synchronization with display of the concert video track.
26. The method of claim 25 further comprising the step of providing a bypass simulation mode in which the pre-recorded instrument track is suppressed and the audio signals generated by the musical instrument while the musician plays the instrument are played on the sound system in synchronization with the concert sound track and with display of the concert video.
27. The method of claim 26 wherein the musical instrument is a guitar.
28. An apparatus for controlling playback from a playback device of a pre-recorded instrument sound track in

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synchronization with a pre-recorded concert sound track and a pre-recorded concert video track comprising:

- a. a musical instrument having an instrument audio output;
  - b. a control circuit connected to the instrument audio output and to the playback device; and
  - c. the control circuit comprising an instrument track input connected to an instrument track output through a signal conditioning circuit, the signal conditioning circuit responsive to audio signals generated by the musical instrument when the instrument is played whereby the control circuit generates a controlled instrument track signal at the instrument track output.
29. The apparatus of claim 28 further comprising a bypass circuit controlled by a bypass switch and operatively connected to the control circuit, the switch having a bypass position in which the bypass circuit inhibits generation of the controlled instrument track signal and allows audio reproduction of the audio signals generated by the musical instrument during playback of video track and the concert sound track.
30. The apparatus of claim 29 wherein the musical instrument is a guitar and wherein the pre-recorded instrument track comprises guitar music.

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January 7, 2008

Greg Deutch  
Vice President, Business & Legal Affairs  
Activision, Inc.  
3100 Ocean Park Boulevard  
Santa Monica, CA 90405

**Via Facsimile &  
Federal Express**

License Offer  
U.S. Patent No. 5,990,405

Dear Mr. Deutch:

Our firm represents Gibson Guitar Corporation ("Gibson") of Memphis, Tennessee, in connection with intellectual property matters. Gibson is the owner of U.S. Patent No. 5,990,405 ("the '405 patent") (see enclosure), which relates to systems and methods for generating and controlling a simulated musical concert experience.


Activision, Inc. ("Activision") provides the Guitar Hero game software franchise, such as Guitar Hero III Legends of Rock, and guitar controllers, such as the Gibson Les Paul branded wireless guitar controller. The Guitar Hero game software has been marketed and sold in different versions and for use with a variety of game console platforms. Like the '405 patent claims, the Guitar Hero game and/or its guitar controllers are focused and specifically made to generate and control a simulated musical concert experience.

Instructions for the Guitar Hero game suggest operating the game by inserting the game disk into a game console, such as a Sony Playstation®3 game console. (See attached Guitar Hero III Legends of Rock Instruction Manual, p. 2.) Once operating on the game console, the Guitar Hero game enables the guitar controller to be used as a musical instrument within a simulated musical concert experience. For example, the Guitar Hero Instruction Manual for the Guitar Hero III game explains that the user can use the whammy bar on the guitar controller to "press in and out on Long Notes to add your own style to each song." (Manual, p. 5.) The Instruction Manual further states "that when you are playing Long Notes, the sound of the note will actually change and bend to reflect how much you're pressing on the Whammy Bar." (Manual, p. 8.) As such, Activision's written instructions suggest and describe using the guitar controller as a musical instrument when playing the Guitar Hero game.

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January 7, 2008  
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FINNEGAN  
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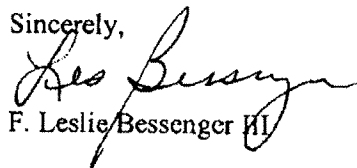
During operation, the Guitar Hero game enables control of a characteristic of the audio for the simulated musical concert as required by the claims of the '405 patent. In one example using the Guitar Hero III game, aspects of the guitar track for a selected song can be separately controlled when compared to the rest of a selected song's audio (*e.g.*, drums, vocals, etc.) heard and shown in a simulated concert venue. This controls or varies signals from the guitar controller and responsively changes a characteristic of the audio portion of the musical performance of the selected song (*e.g.*, changes the sound of the guitar track when compared to rest of the audio for the selected song). (See Manual, p. 8-9.)

Accordingly, based on our preliminary analysis, the Guitar Hero software (including any expansion packs) and the guitar controller provided by Activision being used as a musical instrument (packaged with the software or sold standalone) are covered by the '405 patent. By continuing to sell any version of the Guitar Hero game software and/or instrument controllers for use with the Guitar Hero game software (packaged or sold standalone), Activision is taking advantage of Gibson's patented technology without properly compensating Gibson. Gibson respects the intellectual property of others and expects others to respect its intellectual property as well. Activision already licenses Gibson's trademark rights in association with the Guitar Hero Les Paul Controller. We believe Activision will further benefit from a license to this additional intellectual property owned by Gibson.

In summary, Gibson requests that Activision obtain a license under Gibson's '405 patent or halt sales of any version of the Guitar Hero game software (including expansion packs) and/or instrument controllers for use with the Guitar Hero game software (packaged or sold standalone). Gibson takes this threat to its intellectual property seriously and is prepared to discuss any reasonable resolution to the matter.

We look forward to hearing from you.

Sincerely,

  
F. Leslie Bessenger III

Enclosures

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February 18, 2008

Mary A. Tuck  
Senior Litigation Counsel  
Activision, Inc.  
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Santa Monica, CA 90405

Via Facsimile &  
Federal Express

License Offer  
U.S. Patent No. 5,990,405

Dear Ms. Tuck:

We acknowledge receipt of your letter of January 17, 2008. As an initial matter, the referenced Activision and Gibson agreements involve strictly trademark rights, and do not imply a license to any other Gibson intellectual property, such as Gibson's U.S. Patent No. 5,990,405 ("the '405 patent"). Indeed, the course of conduct only generally referenced provides no nexus to any patent rights owned by Gibson.

To assist you in further assessing Gibson's license offer, we attach a claim chart comparing at least claims 1, 13-15, 25 and 28 of the '405 patent to Activision's Guitar Hero Product. As reflected in the chart, Activision's Guitar Hero Product is covered by the '405 patent.

Again, Gibson requests that Activision obtain a license under Gibson's '405 patent or halt sales of any version of the Guitar Hero Product, including game software (and expansion packs) and/or instrument controllers for use with the Guitar Hero game software (packaged or sold standalone). Gibson has not previously licensed the '405 patent, but takes this threat to its intellectual property seriously and remains prepared to discuss any reasonable resolution to the matter.

Please respond by **February 22, 2008**.

Sincerely,

F. Leslie Bessenger III

Enclosures: Preliminary Claim Chart  
cc: Max C. Marx, Gibson Guitar Corp.

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U.S. Patent No. 5,990,405	Activision's Guitar Hero Product
<p>1. A system for electronically simulating participation by a user in a pre-recorded musical performance comprising:</p>	<p>Activision's Guitar Hero Product, when operating on its intended game console, e.g., Xbox®, Wii™, or PLAYSTATION®, is a system for electronically simulating participation by a user in a pre-recorded musical performance.</p> <p>For example, Activision's online information on the Guitar Hero III Legends of Rock Product describes how use of the product provides a "Fully Immersive Concert Experience" by allowing a user to "realize a true rock concert experience with all new venues, incredible lighting effects, authentic instruments and sick character moves." Activision.com (Guitar Hero III page) (<a href="http://www.activision.com/index.html#gamepagelen_USlgameld:GHIII&amp;brandId:GuitarHero">http://www.activision.com/index.html#gamepagelen_USlgameld:GHIII&amp;brandId:GuitarHero</a>). The Guitar Hero III Legends of Rock Product lets a user "shred lead, rhythm, or bass guitar tracks in over 6 modes of play on over 55 licensed rock and roll songs all on a custom guitar-shaped controller." Activision.com (Guitar Hero III page) (<a href="http://www.activision.com/index.html#gamepagelen_USlgameld:GHIII&amp;brandId:GuitarHero">http://www.activision.com/index.html#gamepagelen_USlgameld:GHIII&amp;brandId:GuitarHero</a>).</p>
<p>a. a musical instrument, the musical instrument generating an instrument audio signal at an instrument audio output, the instrument audio signal varying in response to operation of the instrument by the user of the system.</p>	<p>Activision's Guitar Hero Product includes and is specifically designed to be used with a "Guitar Controller," which the Guitar Hero Product refers to as a guitar. See e.g., Guitar Hero III Legends of Rock Product in-game Basic Tutorial ("Here is your guitar. On the neck of the guitar ....") When operating with the Guitar Hero Product software on its intended game console, the Guitar Controller operates as a musical instrument generating an instrument audio signal at an instrument audio output varying in response to operation of the instrument by the user of the system.</p> <p>For example, the Guitar Hero Guitar Controller generates an electronic signal representing audio being played at an output of the controller in response to the user pressing a "Fret Button," strumming a "Strum Bar," and pressing the "Whammy Bar." See e.g., Guitar Hero III Legends of Rock Product in-game tutorials referring to playing notes and chords with the Guitar Controller; Guitar Hero III Legends of Rock Product Manual, p. 5 ("Green Fret Button - Activates Green Note"); p. 8 ("Press the Whammy Bar in and out on Long Notes to add your own style to each song. You'll notice that when you are playing Long Notes, the sound of the note will actually change and bend to reflect how much you're pressing on the whammy bar.")</p>
<p>b. a video source providing a source video signal at a source video output, the source video signal representing a video portion of the pre-recorded musical performance;</p>	<p>Activision's Guitar Hero Product, when operating on its intended game console, is a video source of a video portion of a pre-recorded musical performance. When operating under the control of the Guitar Hero Product software, a video output signal is provided for viewing on a video display, e.g., a television, where the signal represents an animated character performing a video portion of the selected pre-recorded musical performance.</p> <p>For example, Activision's online information on the Guitar Hero III Legends of Rock Product</p>

Preliminary Claim Chart Relating to Gibson's USPN 5,990,405 and Activision's Guitar Hero System

U.S. Patent No. 5,990,405	Activision's Guitar Hero Product
	describes how use of the product provides a "Fully Immersive Concert Experience" by allowing a user to "realize a true rock concert experience with all new venues, incredible lighting effects, authentic instruments and sick character moves." Activision.com (Guitar Hero III page) ( <a href="http://www.activision.com/index.html#gamepage/en_US?gameId:GHIII&amp;Legends&amp;brandId:GuitarHero">http://www.activision.com/index.html#gamepage/en_US?gameId:GHIII&amp;Legends&amp;brandId:GuitarHero</a> ). See also Getting Started page in Guitar Hero III Legends of Rock Product Manual instructing user to insert game with video data into the intended game console's media drive.
c. a video display responsive to the source video signal whereby the user can view the video portion of the pre-recorded musical performance on the video display;	Activision's Guitar Hero Product is specifically and intentionally made to be used with a video display, e.g., a television, responsive to the source video signal from the intended game console operating under control of the Guitar Hero Product whereby the user can view the video portion of the pre-recorded musical performance on the video display.  For example, Activision's Guitar Hero Product manual states "Use the smallest television screen possible." (Guitar Hero III Legends of Rock Product Manual, Warning Page).
d. an audio source providing a source audio signal at a source audio output, the source audio signal representing an audio portion of the pre-recorded musical performance, the audio portion including an instrument sound track containing pre-recorded musical sounds that would be generated by the musical instrument in the pre-recorded musical performance;	Activision's Guitar Hero Product software, when operating on its intended game console, is an audio source of the audio portion of the pre-recorded musical performance. When operating under the control of the Guitar Hero Product software, a source audio signal is provided from the console's media or hard drive representing the audio portion of the performance (e.g., vocals, guitar tracks, and other song elements), which includes an instrument sound track containing pre-recorded musical sounds that would be generated by the musical instrument in the pre-recorded musical performance.  For example, the Guitar Hero Product has an audio portion including the musical guitar sounds that would be generated by a guitar in the pre-recorded tracks. See e.g., Activision.com (Guitar Hero II page) ("Guitar Hero II® features over 55 jaw-dropping tracks.") ( <a href="http://www.activision.com/index.html#gamepage/en_US?gameId:GHII&amp;brandId:GuitarHero">http://www.activision.com/index.html#gamepage/en_US?gameId:GHII&amp;brandId:GuitarHero</a> ).
e. a system interface device having a first audio input electrically connected to the instrument audio output, a second audio input electrically connected to the source audio output, and a first interface audio output;	Activision's Guitar Hero Product is specifically and intentionally made to be used with game consoles, e.g., Xbox®, Wii™, and PLAYSTATION®, that operate as a system interface electrically connected (e.g., wired or wireless) to the instrument audio output from the Guitar Controller output, electrically connected to the output of the audio portion of the pre-recorded musical performance from the hard drive or media drive during operation of the game, and provide an audio output.  For example, Activision's Guitar Hero Product Manual shows USB connectors used to connect to the Guitar Controller. See, e.g., Guitar Hero III Legends of Rock Product Manual, p. 5.

U.S. Patent No. 5,990,405	Activision's Guitar Hero Product
<p>f. the system interface device including a source audio control circuit responsive to the instrument audio signal, whereby a characteristic of the source audio signal is controlled in response to operation of the musical instrument by the user to provide a controlled source audio signal at the first interface audio output; and</p>	<p>Activision's Guitar Hero Product is specifically and intentionally made to be used with game consoles, e.g., Xbox®, Wii™, and PLAYSTATION®. Such game consoles, when executing the Guitar Hero Product game software, operate as a source audio control circuit responsive to instrument audio signals from the Guitar Controller, whereby a characteristic of the source audio signal (e.g., the pre-recorded guitar track) is controlled in response to the operation of the Guitar Controller by the user. The resulting audio, based upon the user's operation of the Guitar Controller, is provided as a controlled source audio signal on the audio output for the television.</p> <p>For example, the intended game console processor, when operating the Guitar Hero Product game software, responds to electrical signals from the Guitar Controller representing audio being played by, e.g., altering the pitch of the pre-recorded note or responding to user inaction or a misplayed note by suppressing the volume of the pre-recorded guitar track note. See, e.g., Guitar Hero III Legends of Rock Product Manual at p. 8 ("Press the Whammy Bar in and out on Long Notes to add your own style to each song. You'll notice that when you are playing Long Notes, the sound of the note will actually change and bend to reflect how much you're pressing on the Whammy Bar.")</p>
<p>g. an audio playback transducer responsive to the controlled source audio signal such that the user can listen to the audio portion of the pre-recorded musical performance on the transducer, in synchronization with the video portion.</p>	<p>Activision's Guitar Hero Product is specifically and intentionally made to be used with speakers, e.g., television speakers, responsive to the controlled source audio signal from the intended game console operating under control of the Guitar Hero Product game software such that the user can listen to the audio portion of the pre-recorded musical performance on the speakers in synchronization with the video portion of the performance.</p> <p>For example, Activision's Guitar Hero Product manual states "Use the smallest television screen possible." (Guitar Hero III Legends of Rock Product Manual, Warning Page). See also Activision's online information on the Guitar Hero III Legends of Rock Product describing how use of the product provides a "Fully Immersive Concert Experience" by allowing a user to "realize a true rock concert experience with all new venues, incredible lighting effects, authentic instruments and sick character moves." Activision.com (Guitar Hero III page) (<a href="http://www.activision.com/index.html#gamepage">http://www.activision.com/index.html#gamepage</a>) USlgamed:GHIIILegends&amp;brandId:GuitarHero).</p>
<p>13. A system for simulating participation of a user playing a musical instrument in a pre-recorded musical performance having audio and video portions, the musical instrument producing instrument audio signals at an instrument audio output when the instrument is played, comprising:</p>	<p>Activision's Guitar Hero Product, when operating on its intended game console, e.g., Xbox®, Wii™ or PLAYSTATION®, is a system for simulating participation of a user playing a musical instrument in a pre-recorded musical performance having audio and video portions.</p> <p>For example, Activision's online information on the Guitar Hero III Legends of Rock Product describes how use of the product provides a "Fully Immersive Concert Experience" by allowing a user to "realize a true rock concert experience with all new venues, incredible lighting effects, authentic instruments and sick character moves." Activision.com (Guitar Hero III page)</p>

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U.S. Patent No. 5,990,405	Activision's Guitar Hero Product ( <a href="http://www.activision.com/index.html#gamepagelen_US&amp;gameId:GHIII&amp;legends&amp;brandId:GuitarHero">http://www.activision.com/index.html#gamepagelen_US&amp;gameId:GHIII&amp;legends&amp;brandId:GuitarHero</a> )
	<p>The Guitar Hero III Legends of Rock Product lets a user "shred lead, rhythm, or bass guitar tracks in over 6 modes of play on over 55 licensed rock and roll songs all on a custom guitar-shaped controller." Activision.com (Guitar Hero III page) (<a href="http://www.activision.com/index.html#gamepagelen_US&amp;gameId:GHIII&amp;brandId:GuitarHero">http://www.activision.com/index.html#gamepagelen_US&amp;gameId:GHIII&amp;brandId:GuitarHero</a>).</p> <p>Activision's Guitar Hero Product includes and is specifically designed to be used with a "Guitar Controller", which the Guitar Hero Product characterizes as a guitar. See e.g., Guitar Hero III Legends of Rock Product in-game Basic Tutorial ("Here is your guitar. On the neck of the guitar..."). When operating with the Guitar Hero Product software on its intended game console, the Guitar Controller operates as a musical instrument producing instrument audio signals at an instrument audio output when the Guitar Controller is played.</p> <p>For example, the Guitar Hero Guitar Controller generates an electronic signal representing audio being played at an output of the controller in response to the user pressing a "Fret Button," strumming a "Strum Bar," and pressing the "Whammy Bar." See e.g., Guitar Hero III Legends of Rock Product in-game tutorials referring to playing notes and chords with the Guitar Controller; Guitar Hero III Legends of Rock Product Manual, p. 5 ("Green Fret Button - Activates Green Note"); p. 8 ("Press the Whammy Bar in and out on Long Notes to add your own style to each song. You'll notice that when you are playing Long Notes, the sound of the note will actually change and bend to reflect how much you're pressing on the whammy bar.")</p> <p>The pre-recorded musical performances include a sound track portion (e.g., "over 70 of the biggest and loudest songs ever compiled in a game") and a video portion (e.g., "venues, incredible lighting effects, authentic instruments and sick character moves.") See Activision.com (Guitar Hero III page) (<a href="http://www.activision.com/index.html#gamepagelen_US&amp;gameId:GHIII&amp;legends&amp;brandId:GuitarHero">http://www.activision.com/index.html#gamepagelen_US&amp;gameId:GHIII&amp;legends&amp;brandId:GuitarHero</a>).</p>
a. a source playback device for playback of the audio and video portions of the pre-recorded musical performance through corresponding source audio and source video outputs;	Activision's Guitar Hero Product is specifically and intentionally made to be operated on a compatible game console, e.g., Xbox®, Wii™, or PLAYSTATION®, as a source playback device for playback of the audio and video portions of the pre-recorded musical performance through corresponding source audio and source video outputs. During operation, the Guitar Hero Product software enables playback of the musical performance audio portion and video portion, which are provided from the game console's media or hard drive to the game console's processor.
b. a source audio control device for controlling one or more characteristics of the audio portion of the pre-recorded musical performance during playback, the	Activision's Guitar Hero Product is specifically and intentionally made to operate on compatible game console, e.g., Xbox®, Wii™, or PLAYSTATION®, as a source audio control device for controlling one or more characteristics of the audio portion (e.g., the guitar track) of a pre-recorded musical performance during playback. The game console's processor operating the Guitar Hero Product



U.S. Patent No. 5,990,405	Activision's Guitar Hero Product
<p>source audio control means operably connected to the source audio output and to the instrument audio output and having a controlled audio output; and</p>	<p>software is operably connected to the audio portion provided from the media or hard drive and the instrument audio output from the Guitar Controller. Based upon the user's operation of the Guitar Controller, the game console's processor alters a characteristic of the pre-recorded guitar track, which is provided on an audio output as a controlled audio output signal</p> <p>For example, the intended game console processor, when operating the Guitar Hero Product game software, responds to electrical signals from the Guitar Controller representing audio being played by, e.g., altering the pitch of the pre-recorded note. See Guitar Hero III Legends of Rock Product Manual at p. 8 ("Press the Whammy Bar in and out on Long Notes to add your own style to each song. You'll notice that when you are playing Long Notes, the sound of the note will actually change and bend to reflect how much you're pressing on the Whammy Bar.")</p>
<p>c. the source audio control device is responsive to the instrument audio signals whereby at least one characteristic of the audio portion of the pre-recorded musical performance is controlled by playing of the musical instrument by the user</p>	<p>Activision's Guitar Hero Product is specifically and intentionally made to be used with game consoles, e.g., Xbox®, Wii™, and PLAYSTATION®. Such game consoles, when executing the Guitar Hero Product game software, operate as a source audio control device responsive to instrument audio signals from the Guitar Controller, whereby a characteristic of the audio portion of the pre-recorded musical performance (e.g., the pre-recorded guitar track) is controlled by the user playing the Guitar Controller as a musical instrument.</p> <p>For example, the intended game console processor, when operating the Guitar Hero Product game software, responds to electrical signals from the guitar controller representing audio being played by, e.g., altering the pitch of the pre-recorded note or responding to user inaction or a misplayed note by suppressing the volume of the pre-recorded guitar track note. See, e.g., Guitar Hero III Legends of Rock Product Manual at p. 8 ("Press the Whammy Bar in and out on Long Notes to add your own style to each song. You'll notice that when you are playing Long Notes, the sound of the note will actually change and bend to reflect how much you're pressing on the Whammy Bar.")</p>
<p>14. The system of claim 13 wherein the audio portion of the pre-recorded musical performance comprises a separate instrument sound track and whereby the characteristic of the audio portion controlled by the source audio control circuit is a volume level of the instrument sound track played by the system.</p>	<p>Activision's Guitar Hero Product is specifically and intentionally made to be used with game consoles, e.g., Xbox®, Wii™, and PLAYSTATION®. Such game consoles, when executing the Guitar Hero Product game software, operate as a source audio control device responsive to instrument audio signals from the Guitar Controller, whereby a characteristic of the audio portion of the pre-recorded musical performance (e.g., the pre-recorded guitar sound track) is controlled by the user playing the guitar controller as a musical instrument. The Guitar Hero game software comprises data representing a separate guitar track for each pre-recorded song. See, e.g., Guitar Hero III User Manual p. 7 (Audio Settings allow a user to "change the volume of the band (background music), the guitar (the part you're playing), and sound FX (crowd volume, background noises)").</p> <p>For example, the intended game console processor, when operating the Guitar Hero Product game</p>

Preliminary Claim Chart Relating to Gibson's USPN 5,990,405 and Activision's Guitar Hero System

U.S. Patent No. 5,990,405	Activision's Guitar Hero Product
	software, responds to electrical signals from the Guitar Controller representing audio being played by responding to user inaction or a misplayed note by suppressing the volume level of the pre-recorded guitar sound track for that note.
15. The system of claim 14 wherein the musical instrument is a guitar and wherein the instrument sound track comprises pre-recorded guitar music such that the volume level of the pre-recorded guitar music played by the system is controlled by playing of the guitar by the user	<p>Activision's Guitar Hero Product includes and is specifically designed to be used with a "Guitar Controller", which the Guitar Hero Product characterizes as a guitar. See e.g., Guitar Hero III Legends of Rock Product Manual, p. 6 ("Which guitar are you going to use to shred up the stage."); Guitar Hero III Tutorial ("Get ready to play your guitar"). See also Guitar Hero III Legends of Rock Product in-game Basic Tutorial ("Get ready to play your guitar"; "Here is your guitar"; "On the neck of the guitar ...") The Guitar Hero game software comprises data representing a separate guitar track for each pre-recorded song. See, e.g., Guitar Hero III Legends of Rock Product Manual p. 7 (Audio Settings allow a user to "change the volume of the band (background music), the guitar (the part you're playing), and sound FX (crowd volume, background noises)").</p> <p>The intended game console processor, when operating the Guitar Hero Product game software, responds to electrical signals from the Guitar Controller representing audio being played by responding to user inaction or a misplayed note by suppressing the volume level of the pre-recorded guitar sound track for that note.</p>
25. A method of a simulating participation by a musician in a recorded concert comprising the steps of	<p>Activision's Guitar Hero Product, when operating on its intended game console, e.g., Xbox®, Wii™, or PLAYSTATION®, provides a method of simulating participation by a musician in a recorded concert.</p> <p>See, e.g., Activision's online information on the Guitar Hero III Legends of Rock Product describes how use of the product provides a "Fully Immersive Concert Experience" by allowing a user to "realize a true rock concert experience with all new venues, incredible lighting effects, authentic instruments and sick character moves." Activision.com (Guitar Hero III page) (<a href="http://www.activision.com/index.html#gamepagelen_USlgameld:GHIIILegends&amp;brandId:GuitarHero">http://www.activision.com/index.html#gamepagelen_USlgameld:GHIIILegends&amp;brandId:GuitarHero</a>). The game lets a user "shred lead, rhythm, or bass guitar tracks in over 6 modes of play on over 55 licensed rock and roll songs all on a custom guitar-shaped controller." Activision.com (Guitar Hero III page) (<a href="http://www.activision.com/index.html#gamepagelen_USlgameld:GHIII&amp;brandId:GuitarHero">http://www.activision.com/index.html#gamepagelen_USlgameld:GHIII&amp;brandId:GuitarHero</a>).</p>
a. playing on a playback device a pre-recorded concert video track in synchronization with a pre-recorded concert sound track and a pre-recorded instrument sound track;	<p>Activision's Guitar Hero Product is specifically and intentionally made to be operated on a compatible game console, e.g., Xbox®, Wii™, or PLAYSTATION®, as a playback device.</p> <p>During operation, the Guitar Hero Product software enables the playback of a pre-recorded concert video track, which depicts an animated character, stage, and lighting effects, in synchronization with a pre-recorded concert sound track (e.g., background music, vocals, and drums) and a pre-recorded instrument sound track (e.g., pre-recorded guitar sound track), which are provided from the game</p>

Preliminary Claim Chart Relating to Gibson's USPN 5,990,405 and Activision's Guitar Hero System

U.S. Patent No. 5,990,405	Activision's Guitar Hero Product
	<p>console's media or hard drive to the game console's processor.</p> <p>For example, sound tracks include "over 70 of the biggest and loudest songs ever compiled in a game," and a video track include "venues, incredible lighting effects, authentic instruments and sick character moves." See Activision.com (Guitar Hero III page) (<a href="http://www.activision.com/index.html#gamepagelen_US&amp;gameId:GHIII&amp;Legends&amp;brandId:GuitarHero">http://www.activision.com/index.html#gamepagelen_US&amp;gameId:GHIII&amp;Legends&amp;brandId:GuitarHero</a>)</p>
<p>b. separating the instrument sound track from the concert sound track and providing the separated instrument sound track to a control device;</p>	<p>During operation, the Guitar Hero Product software enables separation of the pre-recorded guitar sound track from the concert sound track and provides the separated pre-recorded guitar track to a control device (e.g., the intended game console processor).</p> <p>For example, the Guitar Hero Product software comprises data representing separate pre-recorded guitar and concert sound tracks for each pre-recorded song. See, e.g., Guitar Hero III User Manual p. 7 (Audio Settings allow a user to "change the volume of the band (background music), the guitar (the part you're playing), and sound FX (crowd volume, background noises)").</p>
<p>c. varying in the control circuit at least one parameter of the instrument sound track in response to audio signals generated by a musical instrument when played by the musician, thereby generating a controlled instrument sound track; and</p>	<p>Activision's Guitar Hero Product software enables varying at least one parameter of the pre-recorded guitar sound track by the intended game console processor, which generates a controlled guitar sound track in response to audio signals generated by the guitar controller when played by the user</p> <p>For example, the intended game console processor, when operating the Guitar Hero Product game software, responds to electrical signals from the Guitar Controller representing audio being played by, e.g., altering the pitch of the pre-recorded note or responding to user inaction or a misplayed note by suppressing the volume of the pre-recorded guitar track note. See, e.g., Guitar Hero III Legends of Rock Product Manual at p. 8 ("Press the Whammy Bar in and out on Long Notes to add your own style to each song. You'll notice that when you are playing Long Notes, the sound of the note will actually change and bend to reflect how much you're pressing on the Whammy Bar.")</p>
<p>d. providing a normal simulation mode in which the controlled instrument sound track and the concert sound track are played on a sound system in synchronization with display of the concert video track.</p>	<p>Activision's Guitar Hero Product software enables providing a normal simulation mode in which the controlled guitar sound track and the concert sound track are played on a sound system, e.g., television speakers, in synchronization with display of the video animation.</p> <p>For example, the Guitar Hero Product software enables the game console to generate a video output signal for viewing on a television, the video signal representing a stage, lighting effects, and an animated character performing the selected pre-recorded musical performance. See, e.g., Activision's online information on the Guitar Hero III Legends of Rock Product describes how use of the product provides a "Fully Immersive Concert Experience" by allowing a user to "realize a true rock concert experience with all new venues, incredible lighting effects, authentic instruments and sick</p>

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U.S. Patent No. 5,990,405	Activision's Guitar Hero Product
	<p>character moves." Activision.com (Guitar Hero III page) (<a href="http://www.activision.com/index.html#gamepagelen_USlgameld:GHIII&amp;legends&amp;brandId:GuitarHero">http://www.activision.com/index.html#gamepagelen_USlgameld:GHIII&amp;legends&amp;brandId:GuitarHero</a>). See also Getting Started page in Guitar Hero III Legends of Rock Product Manual instructing user to insert game with video data into the intended game console's media drive.</p> <p>In synchronization with this video, the Guitar Hero Product software enables the game console to generate an audio signal comprising the controlled guitar sound track and the concert sound track at an audio output. See e.g., Activision.com (Guitar Hero II page) ("Guitar Hero II® features over 55 jaw-dropping tracks.") (<a href="http://www.activision.com/index.html#gamepagelen_USlgameld:GHII&amp;brandId:GuitarHero">http://www.activision.com/index.html#gamepagelen_USlgameld:GHII&amp;brandId:GuitarHero</a>).</p>
<p>28. An apparatus for controlling playback from a playback device of a pre-recorded instrument sound track in synchronization with a pre-recorded concert sound track and a pre-recorded concert video track comprising:</p>	<p>Activision's Guitar Hero Product, when operating on its intended game console, e.g., Xbox®, Wii™, or PLAYSTATION®, is an apparatus for controlling playback from a playback device, e.g., the intended game console, of a pre-recorded guitar sound track in synchronization with a pre-recorded concert sound and a pre-recorded video animation.</p> <p>See, e.g., Activision's online information on the Guitar Hero III Legends of Rock Product describes how use of the product provides a "Fully Immersive Concert Experience" by allowing a user to "realize a true rock concert experience with all new venues, incredible lighting effects, authentic instruments and sick character moves." Activision.com (Guitar Hero III page) (<a href="http://www.activision.com/index.html#gamepagelen_USlgameld:GHIII&amp;legends&amp;brandId:GuitarHero">http://www.activision.com/index.html#gamepagelen_USlgameld:GHIII&amp;legends&amp;brandId:GuitarHero</a>). The game lets a user "shred lead, rhythm, or bass guitar tracks in over 6 modes of play on over 55 licensed rock and roll songs all on a custom guitar-shaped controller." Activision.com (Guitar Hero II page) (<a href="http://www.activision.com/index.html#gamepagelen_USlgameld:GHII&amp;brandId:GuitarHero">http://www.activision.com/index.html#gamepagelen_USlgameld:GHII&amp;brandId:GuitarHero</a>).</p>
<p>a. a musical instrument having an instrument audio output;</p>	<p>Activision's Guitar Hero Product includes and is specifically designed to be used with a "Guitar Controller," which the Guitar Hero Product refers to as a guitar, which is a type of musical instrument. See e.g., Guitar Hero III Legends of Rock Product in-game Basic Tutorial ("Here is your guitar. On the neck of the guitar ....") When operating with the Guitar Hero Product software on its intended game console, the Guitar Controller operates as a musical instrument generating an instrument audio signal at an instrument audio output varying in response to operation of the instrument by the user of the system.</p> <p>For example, the Guitar Hero Guitar Controller generates an electronic signal representing audio being played at an output of the controller in response to the user pressing a "Fret Button," strumming a "Strum Bar," and pressing the "Whammy Bar." See e.g., Guitar Hero III Legends of Rock Product in-game tutorials referring to playing notes and chords with the Guitar Controller; Guitar Hero III Legends of Rock Product Manual, p. 5 ("Green Fret Button - Activates Green Note"); p. 8 ("Press the</p>

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	Whammy Bar in and out on Long Notes to add your own style to each song. You'll notice that when you are playing Long Notes, the sound of the note will actually change and bend to reflect how much you're pressing on the whammy bar.")
b. a control circuit connected to the instrument audio output and to the playback device; and	Activision's Guitar Hero Product is specifically and intentionally made to be used with a game console, e.g., Xbox®, Wii™, and PLAYSTATION®. Such a game console comprises a processor that, when executing the Guitar Hero Product software, operates as a control circuit and is operably connected (e.g., wired or wireless) to the instrument audio output of the Guitar Controller (e.g., electrical signals representing audio being played).
c. the control circuit comprising an instrument track input connected to an instrument track output through a signal conditioning circuit, the signal conditioning circuit responsive to audio signals generated by the musical instrument when the instrument is played whereby the control circuit generates a controlled instrument track signal at the instrument track output.	<p>Activision's Guitar Hero Product is specifically and intentionally made to be used with game consoles, e.g., Xbox®, Wii™, and PLAYSTATION®. Such game consoles comprise a processor that, when executing the Guitar Hero Product software, operates as a signal conditioning circuit.</p> <p>During operation, the intended game console processor accesses the pre-recorded guitar track at an instrument track input, e.g., through the game console's media or hard drive. See e.g., Activision.com (Guitar Hero II page) ("Guitar Hero II® features over 55 jaw-dropping tracks.") (<a href="http://www.activision.com/index.html#gamepagelen_US&amp;gameid:GHI&amp;brandId:GuitarHero">http://www.activision.com/index.html#gamepagelen_US&amp;gameid:GHI&amp;brandId:GuitarHero</a>). The resulting audio, based upon the user's operation of the Guitar Controller, is provided as a controlled source audio signal at an instrument track output, e.g., the game console's audio output.</p> <p>For example, the intended game console processor, when operating the Guitar Hero Product game software, responds to electrical signals representing audio being played from the Guitar Controller by, e.g., altering the pitch of the pre-recorded note or responding to user inaction or a misplayed note by suppressing the volume of the pre-recorded guitar track note. See, e.g., Guitar Hero III Legends of Rock Product Manual at p. 8 ("Press the Whammy Bar in and out on Long Notes to add your own style to each song. You'll notice that when you are playing Long Notes, the sound of the note will actually change and bend to reflect how much you're pressing on the Whammy Bar.")</p>

EXHIBIT

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**ACTIVISION.**

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March 10, 2008

Via Email and Mail

F Leslie Bessenger III  
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**RE: U.S. Patent No. 5,990,405**

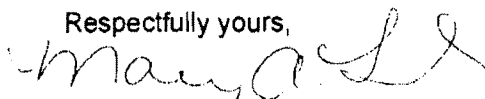
Dear Mr. Bessenger:

This responds to your February 18 letter, in which you allege that Activision's Guitar Hero products are covered by Gibson's U.S. Patent No. 5,990,405, and demand that Activision either enter into a license under the '405 patent or "halt sales of any version of the Guitar Hero Product."

As I indicated previously, Gibson knew about the Guitar Hero games for nearly three years, but did not raise its patent until it became clear that Activision was not interesting in renewing the License and Marketing Support Agreement. Gibson's delay suggests that its infringement assertions are not being made in good faith, and it has provided no justification for its conduct.

Based on our analysis of the '405 patent and the claim chart attached to your letter, we do not believe that any of Activision's Guitar Hero products infringe any valid claim of the '405 patent. Activision therefore declines your offer to enter into a license under the '405 patent.

Respectfully yours,



Mary A. Tuck  
Senior Litigation Counsel

EXHIBIT

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